

Per. 1918 d. $\frac{129}{1.2}$



Per. 1918 d. $\frac{129}{1.2}$

$\frac{23}{64}$

1914. 1377

2500 14

210

THE
FLORICULTURAL
CABINET
AND
FLORIST'S MAGAZINE

Edited by
Joseph Harrison

Editor of the
GARDENER'S RECORD,
&c. &c.



LONDON,
Whitaker and C?
Ave Maria Lane.

SHEFFIELD,
George Edge
King Street.

1834

J & J Parker

THE
FLORICULTURAL
CABINET,
AND
FLORIST'S MAGAZINE.

MARCH TO DECEMBER, 1833.

VOLUME I.



CONDUCTED BY JOSEPH HARRISON,

GARDENER TO THE

RIGHT HON. LORD WHARNCLIFFE,

WORTLEY HALL.

LONDON :
WHITTAKER, TREACHER, & CO. AVE-MARIA-LANE ;
AND G. RIDGE, SHEFFIELD.

PREFACE.

IN presenting our First Volume to our numerous friends and correspondents, we must be allowed to say, that we do it with a very grateful recollection of the unlooked-for success with which we have been honoured. The great kindness with which our endeavours have been received—the gratifying notice into which they have risen—and the wide and increasing extent of our circulation,—while they have exceeded our expectations, almost our hopes,—will serve to stimulate our future exertions to confirm and secure, if not to command and deserve, this large share of public patronage.

We have proposed our plan—we have made our professions—and our readers may now judge of the goodness of the one, and the honesty of the other. Aware of the labour and constant watchfulness which such a publication would require, we hold that the circulation of nearly FIFTY THOUSAND copies during the nine months of our literary existence, is a convincing and most gratifying proof that we have neither shrunk from the former, nor been careless in the latter;—while the valuable assistance we have received from our brother Florists has greatly lessened our toil and quickened our energies; and while we profess for ourselves the same unwearied attention to the interests of Floricultural

knowledge, we would remind our many and valued correspondents that our success mainly depends upon a co-operation which must be cordial and mutual, and that in calculating upon our future advancement in public estimation, we would assure them of our reliance upon their continued support and most valuable assistance, which will place beyond risk the success of a work to the patronage of which they have so essentially contributed.

Wortley, Nov. 28th, 1833.



LEWIS'S COMMANDER IN CHIEF,
Engraved for the Floricultural Cabinet

Bell & Tompkin Sh

THE
FLORICULTURAL CABINET,

MARCH 1st, 1833.

INTRODUCTION.

THE vegetable creation in its varieties of form, colour and scent, has had its increasing attractions to mankind from the days of Adam down to the present period ; and such is its fascinating influence, that it excites admiration from the earliest age of infancy to the decline of life,—from the inmates of the cottage to those of the palace : and at the present day a taste for the cultivation and accumulation of flowering plants is so universal, that it appears their presence is considered a necessary appendage to the dwelling.

For this lovely order of creation we have from early childhood possessed almost an hereditary attachment, and having derived much pleasure ourselves from an attention to the culture of the riches and beauties of vegetable nature, we are solicitous that other persons should be partakers of the daily increasing delight it affords ; in the promotion of which we are anxiously disposed to employ all the means and energies we possess.

To accomplish the object of our solicitude in the best possible way, to the greatest extent, and in a manner most calculated to benefit, is not in the power of an individual ; this can only be done by the united talent and experience of a gardening public. To obtain help so important and desirable, we therefore most humbly and respectfully solicit the co-operation of all lovers and cultivators of flowers to communicate the result of any improvements or observations upon any thing interesting connected with Floriculture, because the wider the range of practice and intelligence, the greater their number and importance will most certainly be. A medium through which to circulate them was therefore necessary ; for although there are existing publications in whose pages the culture of flowering plants is admitted, yet they are of too general a character for great numbers of Floriculturists ; for in order to obtain what may be inserted that is of interest in Floriculture, a far greater portion of matter has to be purchased, which to them is wholly useless.

VOL. I.

B

Though it is admitted that there are lovers of flowers who are equally attached to the other branches of Horticulture, Arboriculture, &c. yet a far greater portion are what is usually denominated Florists only. To such persons, the purchasing of the works referred to, much unnecessary expence had to be incurred. This circumstance has frequently been a source of complaint made to us, since we commenced (being the original projector of that Publication) the *Horticultural Register*: the bringing forward of the present Work will we trust obviate the evil complained of.

We are not bringing forward "THE FLORICULTURAL CABINET and FLORIST'S MAGAZINE" with a view of being rival to any existing work, but to afford an opportunity to those persons desirous of it, of purchasing a work which will be solely devoted to the object stated, and thus aiding as an auxiliary to forward the interests of gardening.

The nature of the FLORICULTURAL CABINET, &c. will be such as to comprise Original Communications from our friends, select Extracts from other Works, of every thing useful and interesting connected with Floriculture; Lists and Descriptions of the newest and handsomest flowering Plants, with Engravings of those possessing superior merit will be regularly given; also Plans of Stoves, Greenhouses, Conservatories, and other Plant Structures, Flower Gardens, Grounds, &c. No expence will be spared so as to have them executed in a correct and superior manner.

A monthly Floricultural Calendar will be given in each number, so as to give instruction for the ensuing month.

An annual List of the newest and handsomest Plants will be added, with appropriate connected references.

The Work will be printed on a small type, to give as much matter as possible in each number, and the arrangement will be classed so as to be referred to with the greatest readiness.

The greatest simplicity in expression will be attended to, so that each Article may be clearly understood by every reader.

To effect the above objects in the most useful and acceptable manner, the Conductor invites the co-operation of Floricultural friends, to communicate through the medium of this publication the result of any improvements or other interesting subjects of the nature required. Accounts of new, rare, or interesting Plants, whether Exotic or Hardy, Lists of all Horticultural and Florist's Meetings, &c. &c. any of which will be very acceptable to, and gratefully acknowledged by, him. Whilst connected with the *Horticultural Register*, the kindness of our friends in transmitting communications to us was very highly flattering, and being so extensive as to afford us a very considerable stock on hand.

we therefore hope, that as the favours of our friends have been so numerous and liberally given us in the past, we shall receive a continuance of their support in future. And as an active proof that we feel grateful for their favours, no exertion on our part shall be wanting, but our utmost attention and labours shall be so devoted, as to render the **FLORICULTURAL CABINET**, in some degree worthy the interesting subjects it comprises, and enable us at all times cheerfully to address our Correspondents.

Wortley Hall, Feb. 20th, 1833.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Dahlia.* By a NOTTINGHAMSHIRE FLORIST.

This, one of the most splendid of all flowering plants, is now cultivated in Great Britain nearly universally where local circumstances are favourable. Having very extensive journeys to take during the summer season through most districts of the kingdom, my travelling is made of a very agreeable character by observing the very general taste for the cultivation of flowering plants; and for the last ten years I have noticed every successive season a very apparent increase. Among the varied attractions in flowers, none has arrested my attention so forcibly as the Dahlia in all its splendid varieties of colour and form, and no other plant of recent introduction has spread so rapidly through the country, which is full proof of the superiority of the flower.

My travelling admitting of very frequent calls in noblemen, gentlemen, and florist's gardens, also in nursery establishments, it gives me not only the gratification of viewing "in connexion with other things" the flower in question, but at the same time affords me opportunities of seeing where it is cultivated most to perfection. The result of my observations is, that it thrives the best in those situations where the soil is of a sandy nature, and the plants are placed at some distance apart, and not crowded together as is often the case.

The soil of the neighbourhood of my own residence is of the above description, and the Dahlia is as well cultivated in this district as anywhere I have seen. Being a grower of the plant myself to a moderate extent, and as successfully as any I see, I send you the result of my

practice for insertion in your proposed (for I see the notice of it by advertisement) Florist's Magazine; and as the season is approaching for commencing operations in gardening, if you judge my method will be of service to your readers who may be cultivators of Dahlias, I should suggest its appearance in the first number.

About the first week in February I make up a slight hot bed of already fermented horse dung, immediately placing upon it a three-light frame, and keep the glass closed for three or four days; by this time the bed is usually settled. I then spread over the surface of the bed about two inches deep of sandy soil, upon this I place my Dahlia roots as closely as possible, and sprinkle amongst them as much soil as covers the tips of the roots about one inch. Thus covered, allows the tips to strike a little of new fibres, but not so many as to give the roots any injurious check when removed out of the frame, but it assists to push shoots earlier than if none was sprinkled among them. I then keep the lights regularly closed, unless a burning heat by accident arises, in which case I give a little air day and night for a short time. When the shoots have pushed about six inches long, I cut off close to the old root all excepting one to each division of the old root. I find when the root is excited, it more easily divides than previous to it. The shoots I take off I insert in a very sandy soil in pots, placing them closely together and close to the sides of the pots. In about a week or ten days at farthest they have generally struck root. I then put each plant into a separate pot using small pots. I then place them again in the frame or green-house, but I prefer the frame when I can appropriate it for the purpose. I have several times taken off shoots when they have been about two inches long, but I generally found them to perish. If one casually did strike root, it did not grow any thing near so well as those shoots did which were allowed to grow to about six inches long before taken off. When the shoots are taken off the old roots, I then divide and pot them, placing them in a green house, taking care not to have them upon any fire flue which is heated, as I have found when I did so many of the roots perished. If more than the single shoot left to each portion of old root should afterwards push, I take all such off, and only allow the first shoot to remain. As the shoots advance, I take care to have them securely tied up to a stick, as they are very liable to break off at their origin.

When I judge that there is no longer any reason to apprehend frost, I turn out my general stock into the open ground.

The soil of my garden is, as before stated, a very sandy loam eighteen inches deep. I select an open situation, for when planted near a hedge or wall the Dahlias are drawn up weakly; but in an airy part of my

garden, they are something like moderate sized thorn bushes for size. Previous to planting, I have the ground very well manured and trenched to the bottom. In planting, I place the tallest growing sorts for the back row or north side of the border, and the lesser sorts are regulated proportionably. The height of the sorts I have, I mark down annually, and being each year planted and treated alike, I am never disappointed of having a uniform arrangement. The distance I plant apart is, for those sorts which grow with me eight feet high, ten feet apart; six feet high, seven feet six apart, and so in proportion all the rest. I water well in dry weather. The method I adopt in securing the plants from being broken by the wind, is to have one support at the upright stem of the plant, and afterwards as the laterals advance, to place six or eight strong stakes at equal distances around it; to them the branches are regularly secured.

Towards the close of the flowering season, I have a few inches deep of soil spread over the roots close up to the stem of the plant, and for about one foot around it; this prevents sudden frosts from damaging the crown of the roots, which sometimes by the wind moving the plant, an opening is caused at the stem and the frost has access to the root, and if the eyes at that part be damaged by frost, all the other part of the root, however sound it may be, is useless, and will not push shoots the following season. I do not plant more than two years on the same piece of ground, or if promiscuously in borders with other flowers, I vary the place every season. I find them so much more inclined to bloom freely and run less into foliage when planted in fresh soil.

In taking up the roots, I do it when the weather is dry, and leave all the soil to them that I possibly can. I have them carefully taken into a back shed where there are fires; they are placed on shelves and thus gradually dry. The retaining of the soil with the roots is of importance to their preservation, as it keeps them plump and sound. I have not had one perish that has been so treated for the last ten years. With small roots it is sometimes difficult to keep the soil to them. However, such I pot in moderate dry soil, and place them upon the shelves with the others. Before I adopted this method of retaining soil with the roots, I found that small roots which had not very short and plump tubers when left exposed, dried and shrivelled so much at the junction of the tubers to the main trunk or stem, that numbers of the roots perished. By retaining the soil, a great number of fibrous roots are left undisturbed, and that with the circumstance of the moisture of the soil gradually drying up, the roots are regularly brought to a state of repose.

At the time of planting the roots in the frame, in February, I shake

off all the old soil from them, being careful not to twist or break the tubers near to the trunk of the root.

I have found the plan of retaining soil to the roots when taken up, to be very serviceable in the case of late seedlings, such often having but long and small tubers, but with such my plan has never failed to preserve them well. You shall hear from me again.

A NOTTINGHAMSHIRE FLORIST.

Feb. 6th, 1833.

[We shall be glad to hear from our respected Correspondent at his own convenience.—CONDUCTOR.]

ARTICLE II.—*On the Culture and Propagation of the Erythrina Crista Galli.* BY SAINT PATRICK.

Sir,—I frequently find during my routes, very large plants of that beautiful exotic, *Erythrina Crista Galli*, with scarcely a single blossom upon them; should you consider these few practical Hints worth noticing, they are quite at your service. In propagating this exotic, I take off young shoots from the mother plant when they are about four inches long, I pull them off with a little of the old bark attached to each; this is done any time from January until May. I plant the young shoots each one in a small pot, with a mixture of loam and sand, and afterwards plunge them into a good brisk heat. Shading and watering is particularly attended to. In three or four weeks the plants will have filled the small pots with roots, when they are shifted into 32 sized pots with their balls entire, using rich strong loam. A good heat, plenty of air and manure water is necessary until the beginning of October, when I find a lesser quantity wanted. As soon as the foliage has decayed, I cut the plants down to within six inches of the roots, turn them out of the pots, clean the roots, and preserve them in sand kept in boxes. Early in January I pot the roots into 32 sized pots, with the compost as named before, and then plunge them into a hotbed frame or pine pit. The roots soon push out a quantity of shoots, when I allow only four to remain on for flowering, (the others may be put into pots as before stated;) about the middle of March the plants require re-potting into 24 sized pots, and kept in a good bottom and top heat. These plants will flower very fine in April. Early in January, 1831, I potted a two-year old cutting, in April it was six feet high, and profusely covered with blossoms. In May last I cut it down close to the original stem, and in July it was equally as splendid as it was in April. In August I cut it down again, and flowered it for the third time in October; the plant each time was six feet high, and was

exhibited three times at the Horticultural Shew at Chichester, in the same pot in which it flowered in April. It has been recommended to raise young plants from cuttings taken from the strong shoots when the wood is quite hard, and not from young shoots. I have tried both methods repeatedly, and I can obtain much finer plants in one year from the young shoots, than from the hard wooded cuttings at two years old.

SAINT PATRICK.

ARTICLE III.—*On the Culture of various Species of Fuchsias as Border Plants.* By S. J.

A description of the various species of this genus of plants in this Article may be unnecessary, as nearly the whole of the tribe is generally well known, I shall therefore only add, that the family is a most lovely one. The neatness of the growth of each of the species, the gracefulness of the pendant blossoms, and the contrasted fine splendid colours, all unite to render these plants highly meriting the most attentive culture, whether kept in pots, or otherwise treated. I have latterly cultivated a number of sorts in the open borders; the following mode of treatment is that practised me.

In September I take off a quantity of young shoots, cutting them off close to the old wood. I strike them in small pots filled with white sand. After watering, and allowing the soil to drain a little, I place them in a hotbed frame. When they have taken root, I pot them singly into 48 sized pots, and put them into a greenhouse. When they have begun to strike root again into the new soil, I pinch off the leading shoot of each plant, in order to make them throw out lateral shoots, and become bushy plants. Towards the end of April I select the situations where I propose to plant out the Fuchsias, having beds of some sorts, and others planted singly in the flower borders; in both cases, I take care to have the bottom well drained with broken pots or something of that nature; the soil is then strongly enriched with well-rotted manure. When I plant a bed of Fuchsias, I generally have oblong or irregular shaped beds planted with one species; but when I have a square or round bed, I put the tallest sorts at the centre, and the smaller ones towards the edge of the bed, so that its appearance is that of a cone or pyramid, and the effect is thus rendered more beautiful by the regularity and uniformity of a mass of brilliant pendant flowers. When I plant out singly in the border, I of course plant the taller sorts furthest from the edge.

If the summer be drouthy, I attend well to watering at the roots, and as I have abundance of manure water which drains from the farm-yard, I occasionally give them copiously of that.

In the autumn I cover the roots with old tanner's bark, or a mulchy sort of manure, to the depth of six inches, covering the latter with a little soil.

During winter, if it happens to be severe, some of the plants suffer. In the spring such require pruning, some cutting off to about four inches from the ground, and the bark or other covering is taken away and some well rotted hotbed dung just pointed in, or spread over the roots, and hid by a slight covering of soil. Those plants that have not received much injury only require their side shoots cutting off to about two inches from the main stem. Trained up, and treated in other respects as above described, the plants have a most beautiful effect. I have some plants in sheltered warm situations which have grown seven, and others eight feet high in one season; during the last they were almost a complete mass of flowers, and nothing could exceed their pleasing appearance.

The following sorts are what I have cultivated in the above manner; Fu'CHSIA, GRA'CILIS, TENE'LLA, VIRGA'TA, CO'NICA, COCCI'NEA, THYMI-FO'LIA, and MICROPHY'LLA.

Near Leeds, Feb. 2d, 1833.

S. I.

ARTICLE IV.—*On the Cultivation of Aza'lea i'ndica and varieties, purpu'rea plè'na, ledifolia phœni'cea, and hybrî'da.* By MR. JOHN MENZIES, Gardener to Christopher Rawson, Esq., Hope House, near Halifax.

The Aza'lea i'ndica was introduced from China in 1808, and admitted with the above varieties by many persons, to be the finest plant in cultivation. The means necessary to be used in order that they may be made to flourish and flower in succession from September to March, appears to be but little known. Should you consider the following treatment deserving a place in your "Floricultural Cabinet," it is at your service.

In September, the plants being potted, I take one of each kind into a plant house, the temperature of which, at night, is kept from 60 to 65 degrees of Fahrenheit, the plants being from eighteen inches to two feet high. This is done in order to make the plants push young shoots. Being properly attended to in watering, and syringed about twice a week, they grow amazingly. About the middle of November I take a

second lot into the same heat, and treat them in like manner, and the others remaining are treated as greenhouse plants.

About the first week in March, I removed the first lot into the greenhouse, and the second lot in the first week in April. Being at this time advanced in growth, they required no other attention than watering and air, similar to other greenhouse plants.

In June I turn them all out of doors, where they remain till September. The first lot is then taken into the plant house, and treated as before described; these continue to flower till November, when they are succeeded by the second lot, and by the time these are out of flower, those that are in the greenhouse, succeed and continue to bloom till March.

I have at this time plants of this beautiful tribe which have been covered with flowers since September. After flowering they are kept in the same heat as before, till the young wood is in a forward state of growth, when they are removed to the greenhouse.

After flowering, the plants that require it are potted in a well prepared compost of equal parts of tree leaf soil and heath mould, with a small portion of hazel loam and rotten dung.

All the above sorts of *Aza'leas* may be propagated by cuttings from March till August. The *indica* I prefer laying in the pot that it grows in. The *phoenicea* grows best inarched on *ledifolia*, being a strong grower. I have them on stalks three feet high, making strong and vigorous shoots. By impregnation they seed freely.

Aza'lea ledifolia stood for the last three years planted out of doors, and has flowered every spring. With the *Aza'leas* I have had flowering *Epid'endrums*, *Ble'tias*, *S'alvias*, *C'actus trunca'tus*, *Cypripe'dium insi'gne* and *ve'nustum*, also the beautiful *Goodye'ra discolor*, throwing up flower stems from twelve to fifteen inches high.

JOHN MENZIES.

ARTICLE V.—*On the Cultivation of Sa'lvia Africa'nus.*

By Mr. T. K. SHORT.

This very beautiful *Salvia* is seldom or ever seen to flower well in the open air in this country. From my attention to its culture, I find it requires a treatment quite peculiar to itself, in order to succeed to satisfaction. By the method I practise, I uniformly obtain spikes of flowers eight or ten inches long, but this season I had dwarf plants in 36 sized pots, which had spikes fourteen inches long, and from the fine deep blue colour of the flower, they had a very splendid appearance. My mode of treatment is as follows :—

C

In February or March I take the ends of the shoots from the old plants, which had been kept in a greenhouse, and prepare each cutting by dressing off a few of the bottom leaves, and cutting through the stalk close under a joint. I insert these cuttings in a pot, planting them in white sand; and after placing a bell glass over them, plunge them in a hotbed frame, the heat not being very powerful. Care is taken to wipe out the bell glass every day to prevent the cuttings damping off. In a month or five weeks I find them sufficiently rooted to bear removing into small pots. The soil I use is a very rich light loam. They are again placed in a hotbed frame, and kept there till the tops reach the glass; they are then removed into the greenhouse for a short time, so as to inure them regularly to the climate of the open air.

In planting them out in the open ground, the best situation I find is to place them against a south wall, in a very light rich soil. Plants treated as above stated, have with me reached the height of six or eight feet, and produced spikes of flowers quite splendid.

The plants now require staking or otherwise securing to the wall, to prevent their being broken with the wind.

In September I again take off some of the ends of the shoots, cutting them off close under the sixth joint, and plant them singly in 60 sized pots, plunging them in an agreeable hotbed frame. When the pots are full of roots, I remove them into 30 sized ones, placing them in the greenhouse, where they bloom most profusely from November until February. During all the time from planting until flowering, they require a very liberal supply of water.

Marten Hall, Jan. 3rd, 1833.

T. K. SHORT.

PART II.

REVIEWS.

The beauties of the vegetable Kingdom are so varied and striking, that they have engaged the attention and admiration of all classes of society, but all have not alike the objects or opportunity of an equal gratification afforded them. A very numerous class of persons have it not in their power either to possess, cultivate, or even obtain a sight of many of the splendid productions of the earth. This is more particularly the case with reference to the imported treasures of plants that are transmitted from other climes to this country.

A knowledge of the existence of many such plants, or of their culture, would in numerous instances have been very local, we are fully persuaded, from cases that have frequently come under our notice, but from the laudable circumstance of eminent botanists and florists having established valuable periodical publications, which the present taste for floriculture appeared to them to demand. In the present day, no sooner does any plant of interest expand its bloom, than "by the concurring aid of some friend to flowers," some of the periodicals are enabled to spread its representation through an extent of country, and to a number almost incalculable. By the figures of the plants, and descriptions given, the locality of them is ascertained, and shortly, if not already so, they generally are placed within the reach of purchase. The periodicals are not only so far useful, but some of them contain much botanical information, and judicious remarks on the culture of many of the plants.— It is pleasing to us to know that the circulation of such works is increasing; we heartily wish them a much more extensive one.

Although the periodicals thus referred to, are published at as low a price as the nature of the works will admit of; yet it is a fact, that there is a very numerous class of persons, who are also admirers of flowers, but who are debarred the advantages which others have it in their power to obtain. However, by adapting the cost of the present Work to the means of all classes, we intend to put within the power of most persons the knowledge of the existence, the description, and, in many instances, figures of the most beautiful plants. We hope for adequate support to effect this to the best possible advantage. On our part no exertion shall be wanting.

The Botanical Magazine. By SAMUEL CURTIS, F. L. S. Descriptions by Dr. HOOKER, Professor of Botany to the University of Glasgow.

This work was begun in the year 1787. So admirably and ably has it been conducted, and the coloured drawings so well executed, that it has received extensive support ever since its commencement, and it has now reached to plate 3220. The plates and descriptions under the direction of the eminent individuals above stated, are very remarkable for their accuracy and neatness. The number for January, 1833, contains the following beautiful plates:—

1. *Gloxinia speciosa*, variety *albiflora*, showy *Gloxinia*. White flowered variety; class, *Didynamia*; order, *Angiospermia*; natural order, *Gesneriæ*, a stove plant. There is a pale purple blossomed variety now common in the country, but the variety here figured is pure white, a very abundant flowering kind, and well deserving cultivation. Flowers from June to November. *Gloxinia*, so named in honour of Dr. Gloxin, of Colmar.

2. *Lobelia mucronata*, sharp pointed (leaf) *Lobelia*, *Pentandria Monogynia*, natural order, *Lobeliaceæ*, from Chili. A beautiful greenhouse species, but

it is probably hardy enough to bear the open air in England; introduced by A. Cruikshanks, Esq., and bloomed first in August, 1832. Flower, bright crimson, downy, pale in the bud: leaves, oblong lanceolate, minutely serrated, pale green, tinged with red. *Lobelia*, after M. Lobel, a celebrated botanist in 1616.

3. *Cryptophragmium venustum*, stately *Cryptophragmium*, *Diandria Monogynia*; natural order, *Acanthaceæ*: a stove plant from the mountains of Pandua, in India, introduced to the Horticultural Society of London in 1828, bloomed in the Glasgow botanic garden in October. Flower very handsome, in spikes, tube, pale purple, limb, deep purple and white in the centre; leaves opposite, ovate, rough on both sides. *Cryptophragmium*, from *kruptos*, concealed, and *phragmos*, a partition from the concealed dissepiment of the anther.

4. *Epidendrum Harrisoniæ*, Mrs. Harrison's *Epidendrum*, *Gynandria*, *Monandria*; natural order, *Orchideæ*. This fine distinct species (a stove plant) was sent from Brazil by Mr. Wm. Harrison, to his sister above named. Flowers large, of a pale green, whitish in the centre, arranged in a corymb like raceme. *Epidendrum*, from *epi*, upon, *dendrum*, a tree, growing upon trees.

5. *Melaleuca Frazeri*, Mr. Frazer's *Malaleuca*, *Polyadelphia*, *Polyandria*; natural order, *Myrtaceæ*: a beautiful, low, much branched greenhouse shrub, received from the late Mr. Frazer, colonial botanist at Sydney, New South Wales. Flowers connected into a spike, terminated by two or three small shoots, petals white, with fine delicate rose coloured stamens; leaves crowded, smooth, linear, subulate, reflexed, and spreading; propagated by cuttings. *Melaleuca*, from *melas*, black, and *leukos*, white, or white trees.

6. *Scilla villôsa*, hairy leaved squill, *Hexandria*, *Monogynia*; natural order, *Asphodeleæ*. Received from Dr. Dickson in 1831, from Tripoli; the bulbs were planted in the stove at the Edinburgh botanic garden, flowered in November, 1832. Flower, pale lilac, with a broad deep green stripe up each petal. *Scilla* from *Scyllo* to injure, roots poisonous.

7. *Pomaderris betulina* birch leaved *Pomaderris*, *Pentandria*, *Monogynia*; natural order, *Rhamnææ*: a slender much branched greenhouse shrub, from New South Wales, discovered by A. Cunningham, Esq. in October, 1822, flowered in April 1832, at Kew Gardens; flowers small, petals none, calyx pale yellowish white, hairy. It requires a soil with a considerable portion of peat admixed. *Pomaderris*, from *poma*, a covering, and *derris*, skin, on account of the peculiar membranous covering to the capsule.

NO. FOR FEBRUARY CONTAINS,

8. *Beaumontia grandiflora*, large flowered, *Pentandria*, *Monogynia*, *Apocynææ*, from Eastern Bengal, in 1818. This very superb plant much resembles *Datura arborea* in appearance, and is equally fragrant. Flowers, cream coloured, white; leaves, large, oblong. Blossomed at Bretton Hall, in May, 1832. *Beaumontia*, in honour of the late Mrs. Beaumont.

9. *Calceolaria integrifolia*, variety, *Viscosissima*; entire leaved, very viscid; *Diandria*, *Monogynia*, *Scrophularinææ*: raised by MR. CAMERON, at the Birmingham botanic garden, and flowered beautifully in 1832. Flowers, bright yellow, changing to a reddish orange. *Calceolaria* from *calceolus*, a slipper, corolla.

10. *Cineraria Tussilâginis*, coltsfoot leaved, *Syngenesia*, *Superflua*, *Compositææ*, from Teneriffe, a greenhouse plant; flowers, lilac purple, twelve or thirteen corollas in each, very handsome. *Cineraria*, from *cineres*, ashes, the pale colour of the under side of the leaves.

11. *Priestleya villôsa*, villous, *Diadelphia*, *Decandria*, *Leguminosææ*. From Cape of Good Hope, a greenhouse plant, flowering in November: colour, bright yellow, in umbellated heads, pretty. *Priestleya*, from DR. JOSEPH PRIESTLEY.

12. *Bletia acutipetala*, sharp petaled *Bletia*, from South Carolina, *Gynandria*, *Monandria*, *Orchideææ*; petals pale rose colour, labellum, purplish rose coloured, yellow at the base.

13. *Loasa Placei*, Mr. Place's, *Loasa*, variety 2. *Polyadelphia*, *Polyandria*, *Loacææ*. From Chili, flowered in the open border; flowers, small yellow.

14. *Pomaderris andromedafolia*, andromeda leaved, Pentandria Monogynia, Rhamnæ, from New Holland, 1823; flowers, pale yellowish white, in dense corymbs; leaves elliptical, lanceolate, tomentose underneath, an inch and a half long.

The Botanical Register.

This work was commenced in 1815; it has now reached to plate 1662. It is very skilfully executed, and conducted by the very able, intelligent, and learned Professor of Botany in the London University, JOHN LINDLEY, Esq. Too much praise cannot be bestowed upon this work: the judicious selection of figures, their accuracy and faithful representation, are such as we may justly calculate upon, when under the superintendence of so renowned a botanist as Mr. LINDLEY. The number for January, 1833, contains the following plants:—

1. *Senecio Tussillaginæ*, coltsfoot leaved Groundsel; Syngenesia Polygamia Equalis; natural order Compositæ. This is a handsome greenhouse plant, flowering abundantly. The petals are purple on the upper side, and white underneath; the disk is yellow; leaves alternate, sharply toothed at their edges, underside tomentose. Senecio is from Senex, old man, the naked receptacle like a bald head.

2 *Solandra guttata*, spotted-flowered. Pentandria Monogynia; nat. ord. Solanaceæ. This most splendid stove plant was introduced from Mexico by Mr. TATE, of Sloane street Nursery, and flowered the early part of last year, in the stove of Mr. LAMBERT, Boyton House, Wiltshire. The flower is funnel shaped, solitary, and terminal, of a pale yellow, inside the mouth of the corolla is marked with purple. It is fragrant. Leaves alternate, elliptical, oblong: it is readily increased by cuttings. Solandra, named in honour of Dr. SOLANDER, who accompanied Sir JOSEPH BANKS in his Voyage round the World.

3. *Saccolabium papillosum*, pimpled Saccolabium Gynandria, Monandria; natural order Orchideæ. Found growing upon trees in Malabar, and other parts of India. Flower, the labellum is white, and the other part (sepals) is yellow streaked with reddish purple. Blooms Aug. and Sep. Leaves dark green, strap-shaped. It is cultivated by being suspended against a damp wall in the stove, in pots filled with potsherds, mixed with a little earth.—Saccolabium from saccus, a bag, and labium, a lip, in allusion to the bagged labellum.

4. *Sempervivum villösium*, villous Houseleek, Dodecandria Hexagynia, nat. order Crassulaceæ; a greenhouse plant sent from the Canary Islands; flowers in May. Flowers yellow, in a branching cyme. Sempervivum from semper, ever, and vivum, life, because of the species flourishing even in the most barren and parched places.

5. *Salvia angustifolia*, narrow leaved Sage; Decandria Monogynia; natural order Labiata. This pretty perennial species is a native of elevated dry places in New Spain, and Mexico; it grows two feet high. Flowers deep pure blue, with a little white at the centre of the flower. Leaves oblong, linear, serrated and smooth. It requires to be treated as the *Salvia fulgens*, and *mexicana*; in winter protected in a greenhouse, and turned out in the open border in summer. It makes a fine contrast with the other species; it is easily propagated by cuttings.—*Salvia* from *salvus*, safe; its medical qualities.

6. *Milla biflora*, snow-white Milla, Hexandria Monogynia, Asphodèleæ; from the Mountains of Mexico, sent by Mr. GRAHAM, flowered beautifully in August, in the Horticultural Society's Garden, London. It had been planted out in a cold pit, and excluded from the frost in winter. Continues long in bloom. Leaves awl shaped: increased by seeds.—Milla, in honour of JULIAN MILLA, Head Gardener in the Royal Garden of Madrid.

7. *Fuchsia globosa*, balloon-flowered Fuchsia, Octandria Monogynia, nat. order Onagraræ; said to have originated between Fuchsia microphylla and Fuchsia conica. It is a most charming plant; previous to the blossoms expanding, they form so many pendulous crimson globes, and are produced in profusion; when expanded the fine crimson sepals, and its purple petals, make it additionally brilliant. The branches grow in a decurved form: leaves opposite, heart-shaped at the base, acuminate, dentate, and smooth. Fuchsia, in honour of L. Fuchs, a celebrated German Botanist.

NO. 12, FOR FEBRUARY, CONTAINS

8. *Ribes speciosum*, shewy Gooseberry, Pentandria Monogynia, nat. order Grossulacæ. A hardy shrub, native of California, it was raised from seeds brought from Monterey by Mr. COLLIE, in 1828. It is propagated readily by cuttings. Flowers rosy crimson, very handsome, and like one of the handsomest Fuchsias.—*Ribes*, an acid plant mentioned by the Arabian physicians.

9. *Stachys albicaulis*, white-stemmed Stachys, Didynamia Gymnospermia; nat. ord. Labiata. It is a hardy perennial plant, not of much beauty. Flowers rose-coloured, labio, striped. Stachys from stachys, a spike, the form of flowers growing.

10. *Azalea pontica versicolor*, changeable Pontic Azalea: Pentandria, Monogynia, nat. ord. Ericæ; raised at Lord CARNARVON's, Highclere, Hampshire. It is a most abundant flowerer; its blossoms are in large clusters, each corolla diversified with bright yellow, rose of different shades, and white. A most beautiful plant, and now in many collections of plants in the country. Azalea from Azaleos, dry; habitation.

11. *Leucopogon parviflorus*, small flowered whitebeard; Pentandria, Monogynia, Epacrideæ, from New Holland, greenhouse, flowers in May, white. This plant is by some persons called Styphelia parviflora. Leucopogon, from whitebeard, the hairy segments of the corolla.

12. *Brasavola Perrinii*, Perrin's brasavola, Gynandria, Monandria, Orchideæ. From Rio Janeiro, flowers yellowish white. Brasavola, from A. M. BRASAVOLA, an Italian botanist.

13. *Schizanthus pinnatus*, humilis, pinnated schizanthus: dwarf variety; Diandria, Monogynia, Scrophulariæ. This very beautiful plant was raised from seeds sold in London last spring by Mr. CUMING, grows about a foot high; flowers, flesh coloured, and deep red. It is a native of Valparaiso. Schizanthus, from scio, to cut, anthus, a flower.

14. *Gompholobium capitatum*, Decandria, Monogynia, Leguminosæ. Raised in Mr. KNIGHT's nursery, King's Road; discovered in St. George's Sound; a neat little greenhouse plant, flowers, bright deep yellow, flowering in July: increased by seeds and cuttings.

15. *Moschardia pinnatifida*, turnip leaved musk succory, Syngenesia, Æqualis, Compositæ. An annual plant from Chili, grows two feet high, flowers in May, blossoms abundantly, white. Moschardia, from the musky scent.

The Botanical Cabinet.

This Work commenced in 1815, by the very celebrated Nurserymen at Hackney, near London, Messrs. LODDIGES. It was begun with the intention of making the public acquainted with the plants in their possession, in a cheap form, and has now reached to plate 1900. The plates are very neat, and information of the culture, &c. of each plant figured, is given. The observations introduced of a religious character, are very appropriate, and calculated to lead the mind of man from nature to nature's God. It is a very pleasing and instructive publication.

1. *Hedychium ellipticum*, elliptic Hedychium; Monandria, Monogynia; natural order, Scitamineæ. This plant was discovered by Dr. Hamilton, at Narambetty, in upper Nepal; it is a stoye plant, growing four feet high, flowers

in August; flower, white. It is readily increased by dividing the roots, requires a rich loam, and abundance of pot room. *Hedychium*, from hedy, sweet, and chion, snow flower.

2. *Trifolium uniflorum*, one flowered, Diadelphia, Decandria, natural order, Papilionaceæ; an herbaceous hardy plant from Italy, Greece, &c., flowers in July, flower, rose and white. It increases either by seeds or parting the roots, requiring light loam. *Trifolium*, from tres, three, and folium, leaf, three upon a stalk.

3. *Petróphilatrifida*, three-parted, Tetrandia Monogynia, nat. ord. Proteaceæ, a greenhouse plant, native of New Holland, introduced in 1820: grows one foot high, flowers in June, flower yellow; increased by cuttings, requires to be grown in sandy peat. *Petróphila*, from petros, a stone, and phileo, to love.

4. *Maxillária Warreána*, Gynandria, Monandria, natural order, Orchideæ. This splendid plant was collected in Brazil, by FREDERICK WARRE, Esq., and sent to Messrs. Loddiges in 1829. It flowered in the stove, and grows two feet high; flower, labellum fine crimson purple with yellow, the other part white and cream coloured. It is a very fine species, highly meriting cultivation. It requires the stove heat, and to be potted in vegetable earth mixed with a little sand, increased by offsets. *Maxillária*, from the labellum, resembling the maxillæ of some insects.

5. *Vaccineum arboreum*, Octandria, Monogynia, natural order, Ericææ. This is a low shrub from North Carolina, Florida, &c. It is often injured by winter in this country. It is an evergreen; flowers in July; colour of flower, a pretty blush, requires peat and loam. *Vaccineum*, perhaps from the whortle berry.

6. *Iris bicolor*, Triandria, Monogynia, natural order, Iridææ. Probably a native of the Cape of Good Hope. It requires to be protected in a greenhouse; it is a very charming plant. The contrasted colour of the flower is very striking. The petals are a fine pale yellow, with a large dark spot at the base of each, and also slightly spotted near their junction; the plant continues to have a succession of flowers for several months. *Iris*, from iris, the eye: the variety and brilliancy of its colours.

7. *Cereus sesotus*, Icosandria, Monogynia, natural order Opuntiaceæ, bristly cereus. A native of Brazil, sent in 1829; it has a trailing stem, and roots as it proceeds along. It flowers freely in August, and requires a stove heat; colour, under side of petals and the ends of the upper side rose coloured, the rest part white; requires light loam, and increases readily by cuttings. *Cereus*, from cereus, pliant; shoots of some of the species.

8. *Globulária vulgaris*, Tetrandia, Monogynia, natural order, Globularinæ. A native of Switzerland, an herbaceous plant of low growth. Flowers in May, colour, fine blue; its globular flowers render it a plant deserving cultivation. It requires protection in winter. *Globularia*, from the flowers being in globose heads.

9. *Ruellia oblongifolia*, oblong leaved, Didynamia, Angiospermia, nat. ord., Acanthaceæ, from Brazil, a stove plant of very great beauty, blooming in September; flower, a very fine deep rose: it merits universal cultivation. Requires light loam, and is readily propagated by cuttings. *Ruellia*, from JOHN RUELE, Physician to Francis Ist.

10. *Westringia longifolia*, long leaved, Didynamia, Gymnospermia, natural order, Labiátæ. From New South Wales. Requires a greenhouse protection; flowers the latter end of summer; colour, pale blue slightly spotted with yellow. Requires sandy peat, and increased by cuttings. *Westringia*, from J. P. WESTRING, Physician to the King of Sweden.

The British Flower Garden,

Conducted by that well known botanist, Mr. ROBERT SWEET. It is intended to represent the hardy plants of the flower garden that appear to be deserving of culture. The work is very valuable to the florist gardener. The number for February, 1833, contains the following plants:—

1. *Solanum runcinatum*, runcinate leaved nightshade, Pentandria, Monogynia, Solanææ; from Chile, in 1832; thrives well in open borders during summer, but requires a greenhouse in winter. Flowers, violet coloured; leaves alternate, deeply pinnatifid. The plant is easily increased by cuttings or suckers. It is a very pretty plant. *Solanum*, from solari, to relieve, its medicinal properties.

2. *Homeria collina*, copper coloured, Triandria, Monogynia, Irideæ, from South Africa. A very elegant flowering plant, easy of culture, in vegetable mould and river sand, in the open border; flowers, reddish copper coloured with a yellow centre. *Homeria*, from Omereo, to connect, referring to the filaments.

3. *Hermione tereticaulis*, snow flake leaved, Hexandria, Monogynia, Amaryllideæ; a native of France, hardy, flowering freely in a rich deep soil. It is an annually imported bulb from Holland, by the name Surpassant. Segments of a cream colour, becoming white; crown, pale yellow, in a fine truss or head of flowers.

8. *Lobelia colorata*, red leaved, from North America, an hybrid, probably derived from the intermixture of *Lobelia coerulea*, and *cardinalis*; it is a highly ornamental plant, rising to six feet high with a fine spike of blue flowers, a sandy loam and peat soil suits it best, increased by offsets.

The Botanic Garden.

This very neat well conducted work, is under the direction of Mr. B. MAUND, each number has one plate representing four plants. The work merits all the encouragement which its extensive circulation receives; and to the admirers of the flower garden, is a very valuable acquisition. The number for February contains:—

1. *Coreopsis Atkinsoniana*, Atkinson's *Coreopsis*, Syngenesia, Frustranea, Compositæ. From North America, hardy perennial, grows three feet high, flowers July, August. Flowers, golden with a rich dark eye, very handsome. *Coreopsis*, from *coris*, a bag, and *opsis*, appearance, shape of the seeds.

2. *Verbena alata*, winged stemmed vervain, Didynamia, Angiospermia, Verbenacæ, native of Mont Video; grows six feet high, perennial, introduced 1828, flowers, rosy purple, small. *Verbena*, from Ferfaen, its Celtic name.

3. *Collinsia grandiflora*, large flowered *Collinsia*, Didynamia, Angiospermia, Scrophularinæ. A very beautiful perennial from North America, in 1828; grows one foot high; flowers, red and blue, in whorls. If seeds are sown in August it flowers from May to August, sown in spring it flowers from July to October. *Collinsia*, from Z. Collins, of Philadelphia.

Collomia Grandiflora, large flowered *Collomia*, Pentandria, Monogynia, Polemoniaceæ. From North America, 1831; grows 2½ feet high; perennial; flowers in July and August—buff coloured; easily raised from seeds either sown in autumn or spring. Flowers best in poor soil. *Collomia* from *kolla*, signifying glue.

The Gardener's Magazine.

This valuable Publication is very ably conducted by Mr. J. C. LONDON, and its merits, in many respects, are beyond our praise.

"CULTURE OF THE RANUNCULUS.—Some time early in October, 1831, a head of seed from a tolerably thickly petaled light semi-double ranunculus was sown in a square pan of twelve inch sides, by four deep; at each corner was a pipe luted to the sides, open at top and bottom, for the purpose of watering the earth without disturbing the seeds, or allowing a crust to form on the surface. In the middle of the pan was a hole for allowing the superfluous water to drain away. The pan was placed in a cucumber frame with moist heat, and in a fortnight after sowing, the seeds came up. By the end of November they were an inch high, and then removed into a room facing the

south; there they drew towards the light, and began to get of a sickly yellow by the beginning of February. On Valentine's Day a cucumber bed was made, and when the heat was well up, the pan was put into it; here they grew away vigorously, and threw up strong flower stems at the end of April. They were then placed against a south east wall in the open air, in which situation they bloomed abundantly."—*A Village Schoolmaster*.

A Catalogue of choice Ranunculuses, selected from about 800 Varieties, and of select Tulips, Dahlias, Pelargoniums, and Carnations, for 1833. Grown and Sold by the Rev. JOSEPH TYSO, Wallingford, in Berkshire.

A very extensive and choice assortment of the above named flowers are grown and sold by the Author for benevolent purposes. The Catalogue is one folio sheet, folded as a letter, for distribution gratis; application by letter Post paid.

The plan of this Catalogue of Ranunculuses is admirable; it is very descriptive and easy in reference, and to the Florist is highly valuable. The Author states that the collection has been more than twenty-five years in acquiring, and has been selected from a large assortment. The same variety he has often obtained under different names; when after some time the most probable name has been retained, and placed first in the Catalogue, and the others succeed in italics. The colour of every flower was marked when in bloom, and are warranted true to the colour assigned them. Mr. Tyso has raised about 50 superb varieties from seed, for two of which, Leonora and Reform, he has refused £20; he has several others equally good, which will soon be on sale.

We approve so much of the plan, that we should be glad to see it become the standard Catalogue for Ranunculuses. In Tulips and Carnations the colours are also described. We shall here give the Abbreviations relating to the colours in Ranunculuses.

a, ash	ol, olive	co. st, coffee striped
b, buff	p, purple	d. r, dark red
cr, crimson	r, red	l. m, mottled
c. o, coffee coloured	ro, rose	r. st, red striped
d, dark	s, scarlet	w. e, white edged
e, edged	ss, shaded self	w. sp, white spot
g, gray	sp, spotted	w. st, white striped
l, light	st, striped	y. e, yellow edged
m, mottled	w, white	y, sp, yellow spot
o, orange	y, yellow	y. st, yellow striped

The following sorts will give the reader to see the excellency and efficiency of the plan.

WALLINGFORD SEEDLING RANUNCULUSES.

Adelaide (Clarke's) l. sp.	Diadem, y. sp.
Adelaide (Costar's) w. e.	Dulcedo, cr.
Amulet, y. sp.	Earl Grey, g.
Angelina, w. e.	Galatea, l. y. e.
Antagonist, y. e. cr.	Galena (Clarke's) l. sp.
Britannia (Weltjies) w. e.	Garrick (Clarke's) w. sp.
Cavalier, a.	Grandee, y. sp.
Champion, w. e.	Leonora, y. sp.
Clarissa, w.	Magnificent (Clarke's) w. e.
Competitor, y. m.	Melema, w. e.

Mrs. Clarke (Clarke's) y. e.
 Othello (Brown's) d. c.
 Reform, y. e.
 Regalia, y. e.

Tiara, y. e.
 Valetta, l. b. sp.
 Victoria, y. e.
 William IV. (Clarke's) ro. m.

The Catalogue contains a great number of sorts, arranged on the above plan, from 5s. to £5 per hundred.—The prices affixed to the sorts.

The proceeds in the sale of the sorts described in the Catalogue, is for a benevolent purpose; this is not particularised, but from the character of the Rev. Gentleman, we hesitate not to say that it is one worthy of support, and we most heartily wish success to attend his efforts.

PART III.

MISCELLANEOUS INTELLIGENCE.

NEW AND VERY HANDSOME DAHLIAS, &c.

The accompanying Engraving of Mr. LEVICK's Dahlia we are enabled to state (from having grown the sort ourselves) gives a very correct representation of its striped crimson flowers; but the Plant, in addition, produces entire flowers of a rich velvet hue, and others of a fine light scarlet, the whole making a very striking and highly beautiful appearance. The plant is a most abundant bloomer, and grows from four to six feet high; it certainly merits a place in every collection of this truly splendid tribe of plants. Mr. Levick possesses a considerable stock of plants, and as we have frequently had the gratification of witnessing Mr. Levick's anxious desire to promote Floriculture, and for other persons to participate with him in the pleasures of Dahlia culture, we are persuaded that plants of this sort may be obtained at a very reasonable price. We have not heard Mr. Levick state the charge per plant, but as we know his object is not profit, we are persuaded the cost will be moderate. Mr. Levick possesses a number of other fine Seedling Dahlias, some of which are very superior. We hope to have the pleasure of giving in future numbers of the *Floricultural Cabinet* correct Engravings of several of them.

CONDUCTOR.

Mr. LEVICK's Address is, Pinstone-street, Sheffield.

Mr. APPLEBY, Florist, St. James's Gardens, Doncaster, has during the last summer been very successful in raising a number of most beautiful seedling Dahlias, among which is a pure yellow, rich crimson, and deep red, of the Anemone-flowered varieties; but the most striking of any is a striped Dahlia of the common class, the colours of which are as distinct as is usual in a per-

fect flaked Carnation. The ground colour (as it is usually called) is a light lilac, and each petal has a broad deep rose-coloured stripe, formed exactly up its centre. The specimen we saw in September last, was a very compact formed flower, and perfectly regular in its stripes, and merits the attention of every lover of these splendid flowers. When we visited the garden of Mr. APPLEBY, we were struck with its arrangement and order; it reflects great merit on its possessor: the collection of handsome flowering plants was very extensive and select. We were pleased with the formation of a small structure for striking exotic cuttings in, and hope Mr. APPLEBY will give us a plan of it for our Publication. His method, too, of substituting flat pieces of glass placed over the pots of cuttings, instead of bell glasses, was new to us. Previous to planting the cuttings, pots are filled one half or two-thirds, according to the length of the cuttings, so that the tops do not touch the glass, with soil or sand, &c. After the cuttings are inserted, watered, and allowed an hour or so to dry a little, the pieces of glass are laid flat over the pots. Mr. A. states the glass does not require drying, as is the case with bell glasses; thus much time and trouble is saved; he turns the glass once or twice a day; the method is simple, effectual, and cheap. Mr. A. cuts each glass to an octagonal form, by taking off the corners, so that he states it is not so liable to be disturbed as when square. Our esteemed friend Mr. MEARNS, Gardener to his Grace the Duke of Portland was, as far as we can ascertain, the first to adopt the above method, which he did when at the Duke of York's, Oatlands, 27 years ago; but Mr. MEARNS informs us he prefers the glass being left square, as being readier to take hold of, and the glass when no longer wanted for cuttings, is useful for glazing purposes, and thus no loss is occasioned. CON.

NEW DAHLIAS.

We shall give a List, in this and the next Number, of some of the best Seedlings of 1832. We have just received a List of Dahlias from Mr. WIDNALL, Nurseryman, Cambridge, and feel sorry it came too late for our pages this month. We question whether the collection is to be equalled in the kingdom; particulars shall be given next month. The following superior ones are in the possession of MICHAEL BREWER, Jun., Nurseryman, Cambridge.

- Queen of the Whites, very fine.
- New Camphor-scented white, very fine.
- Lovely Ann, deep rose, centre petals pure white.
- Incomparable Orange, shaded, and excellent formed flower.
- Purpurea perfectissima, rich coloured, well formed.
- Second Surprise, lively purple, very large.
- Mrs Austin, bright crimson red, quilled excellent.
- Rammoo Sammoo, black, very fine.
- Negro, superb black.
- Queen of Belgium, white, tipped with purple.
- La Favourite, orange and yellow, petals distinct.
- Levitt's, lilac and crimson stripe.
- Priscilla, white and lilac.
- Orange and scarlett-striped.
- King of the Yellows, very large and good.

The annexed are also fine sorts, now in the possession of Mr. BREWER, Sen'r Nurseryman, Cambridge:—

Proteus, primrose and purple spotted.

Juliet, very fine blush.
 Foster's Premier, large fine rose.
 Stone-coloured, dark spotted.
 Justinia, very fine, splendid crimson.
 Rosea alba striata, very fine rose and dark lilac stripe, good formed flower.
 Mutabilis, crimson with black stripes.
 Catbushes, rose-leaved, fine striped.
 Fern's purpurea variegata, fine striped.
 Pencillia, white with purple stripes, very good.
 York and Lancaster, some flowers white, and others rose.
 Widnall's carna, very fine large purple.
 Noble grandissima, very fine dark.
 Beaute Perfect, very dark, with light crimson stripes, well formed flower.

REFERENCES TO PLATE NO. 2.

Veronica fruticulosa, flesh coloured shrubby Speedwell, Diandria, Monogynia, Schrophularinæ. Clusters of flowers spiked, many flowered, terminal, stems erect; leaves elliptic, lanceolate. Britain, perennial, flowers in July.

Veronica saxatilis, Rock Speedwell, Diandria, Monogynia, Schrophularinæ. Clusters of flowers corymbose, of few flowers, stems decumbent at the base; leaves opposite, elliptical. Britain, perennial, June, July.

Lobelia speciosa, showy Lobelia. Pentandria, Monogynia, Campanulacæ. This very showy hybrid is said to have been found in a garden in Ireland, growing in a border composed of *Lobelia fulgens* and *cœrulea*. It is a strong free growing plant. It is equally hardy with *Lobelia fulgens* and other North American species; readily increased by offsets. Soil, two parts peat, or vegetable earth, one of loam, and one of river sand. Plants of this showy *Lobelia* grouped among the scarlet and crimson species give it a very pleasing contrastedness of colour.

Hesperis speciosa, beautiful rocket, Tetradynamia, Siliquosa, Crucifera. This beautiful little plant is from Siberia, quite hardy, perennial, grows six inches high, flowers April and May. *Hesperis*, from *esperis*, evening, several of the species being only scented at that time.

QUERIES, REMARKS, &c.

QUERY.—I have availed myself of the pleasure of visiting the gardens of many of our nobility and gentry for the last thirty years; the improvements effected in almost every department are to me quite astonishing, and on the part of many practical gardeners I could name, highly praiseworthy. I intend from time to time to send you the result of my observations and remarks. I have been very much pleased with the very marked improvement in the numerous beautiful varieties of my favourite flower, the Balsam, and of the superior manner in which they are now treated, the plants and size of flowers being so very much finer than what they used to be, even as late as a dozen years back. I shall be glad if any of the readers of the *Floricultural Cabinet and Florist's Magazine* would, through that medium, give me an account of the mode of management in producing flowers so superior. FLORA.

QUERY.—Being an admirer of that very handsome flower the *Gloriosa superba*, and not being able to bloom it any thing equal to what I recollect seeing in a garden in Nottinghamshire some years ago, I should be glad if any of your readers would inform me how to treat the plant, so as to flower it successfully. PRISCILLA.

QUERY.—I shall be glad to be informed how to treat the *Verbena Melindres*, so as to keep good plants through the winter, for turning out in beds during summer. I have failed nearly wholly for several winters. I took up old plants with balls entire, and potted them, also took off a great number



Verónica Fruticulosa



Verónica Sazátilis.



Lobelia Speciosa.



Hesperis Speciosa.

of young rooted runners, and put one in a small pot, placing them in a greenhouse, and others in a cool frame; but in each case, nearly all I wished to preserve died before spring.

AN ENQUIRER.

QUERY.—I shall feel particularly obliged if any of your correspondents will inform me, through the medium of the *Floricultural Cabinet*, how I am to cultivate the *Solandra grandiflora*, so as to make it produce its splendid flowers.

ST. PATRICK.

QUERY.—Can you or any of your readers inform me, what is the best method to adopt in cultivating the various sorts of Stocks, (*Cheiranthus annua*) so as to obtain double flowers. I have been often told that if I gathered seed from the single ones growing close to a double sort, my object would be attained. I have tried it several times but could not find it so. How does it happen that the *double blossom* of this class of plants affects the single flowers? I shall be glad to hear on this subject.

W. B.

BLUE HYDRANGEA.—About a twenty-fifth part of iron filings, mixed in loamy soil, I find always causes the Hydrangea to have blue instead of rose-coloured flowers, but the iron prevents the flowers being as large as when in pure loamy soil; can you inform me of a better method? RICHARD TATE.

A SELECT LIST

OF THE MOST HANDSOME FLOWERING ANNUALS.

The following list of Annuals we insert in compliance with the request of several Correspondents applying to us since we announced the publication of our work. We have ourselves long felt that such a list as would give us a ready reference of the description of annual flowering plants, would be of much utility. In complying with the desire of our friends, we have inserted no flowering plant in the list, but what we ourselves know to be really handsome; although some of them are old sorts, we have not on that account thought they should be omitted, some of such being among the most beautiful. The colour of the flower, height of growth, and time of blooming are given, so that a selection of sorts may be made suited to situation and season of the year. We intend from time to time as new annual flowering plants are introduced and become known, to give lists of them with every particular desirable; also lists of new and handsome herbaceous, perennials, and biennials. Any information of such, and descriptions of, we shall be obliged to our friends to forward to us.

TENDER ANNUALS,

Which require to be sown in February or early in March, in pots, and placed in moist heat till the plants are up. The sorts succeed well planted singly in pots, and kept in a greenhouse during summer. In sowing the seeds use at the surface very finely sifted soil, and press it closely to the seeds.

Where there are great numbers of varieties, the handsomest of them are given, it being judged that many of them are not generally known.

The height in feet, colour of flower, &c., is annexed; P. pots, B. borders.

Browallia elata, blue, 2ft. to 3ft., June, November, P. B. sandy loam.

Do. do. white, do. do.

Do. demissa, blue, 1ft. to 2ft., June, September, do.

Do. elongata, blue and white, 1ft. to 2ft., do.

Do. grandiflora.

Celòsia cockscomb.

Do. cristata, 2ft. to 4ft., June, October, P. very rich loam; many varieties, as, dwarf crimson, buff, yellow, golden, rose, tall red, branching, pyramidal, &c.

Centroclinum reflexum, rose, 2ft., August, September, P. rich light loam.

- Cléome roseum*, rose, 1½ft., June, August, P. B. rich loam.
 Do. *pentaphylla*, white, 2ft. June, August, P. sandy loam.
 Do. *speciosissima*, purple, 2ft., June, September, B. peat.
Commellina cucullata, blue, 2ft., June, September, P. B. light peat.
Gomphrena, globe, *amaranthus*.
 Do. *globosa*, 2ft., June, October, P. or B., varieties as, purple, white, three color'd, two color'd, and striped.
Hibiscus africanus, white, dark centre, 2ft., June, September, P. B. rich loam.
Indigófera endacaphylla, scarlet, 1ft., July, September, P. B. rich loam.
Loasa hispida, yellow, 2ft., July, August, P. B. sandy loam.
Lobelia hypocrateriformis, purple, 1ft., August, September, P. B. peat.
 Do. *genestralis*, blue, 1ft., June, September, P. B. peat.
 Do. *gracilis*, dark blue, 1ft., July, October, P. B. peat.
Lessertia annua, red, 1ft., June, August, sandy loam.
Lophospérmum erubescens, rose, climbing high, July, November, P. B. rich loam; though not an annual, it blooms abundantly the same season as sown; requires frame or greenhouse protection in winter.
Iötus arenarius, yellow, 6in., April, P. B. sandy loam.
Manulea argentea, yellow, 1½ft., July, November, P. B. sandy loam.
 Do. *villósa*, white, 1ft., June, August, do. do.
Mimósa, humble plant.
 Do. *pudica*, purple, 2ft., to 4ft., July, October. P. rich loam; though not an annual it blooms freely first season.
Salpiglossis linearis, yellow, 1ft., to 2ft., July, light rich loam, P. or B.
 Do. *integrifolia*, rose, 1ft., to 2ft., July, August, do. do.
Sálvia foliösa, blue, 1½ft., all season, rich loam, P. or B.

TENDER OR HALF HARDY ANNUALS.

Requiring to be sown on a gentle hot bed, or in pots placed in warmth, till the plants are up, and then may be removed to a cool frame or other sheltered place, or when an inch high be transplanted upon a warm border, or gentle hot bed, till the end of April or early in May, when they may be finally planted into the borders.

- Agératum mexicanum*, blue, 1ft. to 2ft., June, September, rich loam.
 Do. *augustifolium*, white, 1ft., June, August, do.
Anthémis arábicus, yellow, 1ft., to 2ft., July, September, do.
Anagallis indica, blue, 2ft., June, September, do.
Argemone albiflora, white, 1½ft., July, September, do.
 Do. *sulphurea*, sulphur, 1½ft., July, September, do.
Aster chinensis, or China and German Asters included; there are about 40 varieties, as red, white, purple, bonnet, early dwarf, black, superb red, superb white, quill'd white, quill'd red, quill'd blue, striped red, striped blue, striped rose, striped purple, blue, rose, &c. &c.
Athanasia annua, yellow, 1ft. August, November, rich loam.
Anchúsa itálica, blue, 2ft. to 3ft., June, September, do.
 Do. *incarnata*, flesh, 2ft. to 3ft., do. do. do.
Ammóbium alátum, white, 2ft., March, September, rich loam, not annual, but blooms well first year.
Astrágalus reticulátus, blue, 6in., June, July, rich loam.
 Do. *brachyceras*, yellow, do. do. do.
Cáthamus tinctorius, orange, 2ft. to 3ft., June, July, sandy loam.
 Do. *oxycantha*, yellow, 1ft. to 3ft. July, September, do.
Callistéma indicum, blue, 2ft., July, September, rich loam.
Calceolaria pinnata, yellow, 2ft., June, October, do.
Cistus guttátus, yellow, dark spotted, 6in., June, September, rich loam.
 Do. *salicifolium*, yellow, 6in., June, September, do.
Clintónia elegans, blue, 6in., July, September, do.
Caléndula mexicana, yellow, 6in., June, September, do.

(To be concluded next Month.)

MONTHLY FLORICULTURAL CALENDAR

FOR MARCH.

ANNUALS, HARDY.—if the soil be moderately dry may be sown in warm parts of the country, or situations well protected, early in the month, but in cold places not until the end of the month; for if the seeds of many sorts have begun to vegetate, and frost operate upon them, they are often destroyed. The best method of sowing the small seeds in patches is, to have a quantity of finely sifted soil; spread a portion where desired, after scattering the seeds, sprinkle a little more soil over them, and then press it closely upon the seeds, which will assist them in vegetating properly.

ANNUALS, TENDER—(see list, page 21.)—Such as have been sown and may be up, should have all possible air given to prevent their being drawn up weakly. In watering those in pots they must not be watered over the tops, or many of the sorts will be rotted by it. The best method is to flood over the surface of each pot, always using water that is new milk warm. Those annuals sown in frames must be watered (when requisite) with a very fine syringe, or pan rose to sprinkle with; but the best plan is to take advantage of gentle rains. For any seeds yet requiring to be sown use fine soil pressed to the seeds, and when convenient, place the pots (if used) in moist heat till the plants are up.

AURICULAS.—Those requiring top dressing should be done immediately, by taking off about two inches deep of the top soil, and replace it with some very rich, more than one-half of it should be rotten cow dung two years old, and the rest loam and sand. Immediately after this dressing let the soil be well settled by a free watering. By the end of the month the unexpanded blossoms will be nearly full grown; no water must be allowed to fall upon them, or the blossoms would be liable to suffer injury by it. All possible air may be admitted to the plants during the day, only screen from cutting frosty winds.

CARNATIONS.—At the end of the month, the last year's layers kept in pots or beds, during winter, should be planted off into large pots 12 inches wide at the top, 6 at the bottom, and 10 deep. In each pot three plants may be placed triangularly, not planting deeper than to fix them securely. The following compost is most suitable:—2 barrows full of fresh yellow loam, 3 of well-rotted horse dung, and half a barrow full of river sand, well mixed; plant in it without sifting, but breaking very well with the spade; place the plants in a sheltered situation out of doors.

DAHLIAS.—If not already put into excitement, should be done as early as possible, (see page 3.) Seeds should also be sown, placing them in a hotbed frame till up.

HYDRANGEAS.—Cuttings may now be taken off, cutting off the tops of any shoots that have very plump leading buds, about one inch below the bud of each cutting. These inserted, each into a small pot, and placed in moist heat, will soon strike root, and will, with future proper treatment, bloom one fine head each, most strikingly beautiful.

PELARGONIUMS.—Cuttings now put in, struck in a hotbed frame, and potted off as soon as they have taken root, will bloom during autumn.

POLYANTHUSES.—should now be top dressed, as directed for Auriculas, only the soil used need not be so rich. Seed may now be sown; the best method is to raise it in heat, harden gradually, and transplant when large enough.

RANUNCULUSES.—should now be planted, taking care no fresh applied dung is in the soil, nor should the ground to plant in be lightened up more than two inches deep. The soil of the bed should be half a yard deep at the least. The best roots for flowering are such as have the crowns high and firm, with regular placed claws.*

ROSE TREES.—not yet pruned, if allowed to remain untouched till the new shoots of the present coming season be about an inch long, and be then short-

* Since writing the above, an excellent method of cultivating this delightful flower has been given us; it will appear next month.—CONDUCTOR.

ened by cutting back all the old wood to below where the new shoots had pushed, the dormant buds will then be excited, and roses will be produced some weeks later than if pruned at a much earlier season.

TUBEROSES—should be planted, one root in a small pot, using very rich sandy soil; the pots should be placed in moist heat till the plants are up a few inches, then they may be planted into larger pots, and taken into a stove, and finally into a greenhouse.

TULIPS.—At this season such as happened to be affected by canker will appear sickly, the roots should be examined, and the damaged part be cut clean out. If left exposed to sun and air, the parts will soon dry and heal. Avoid frosty air getting to the wound by exposure.

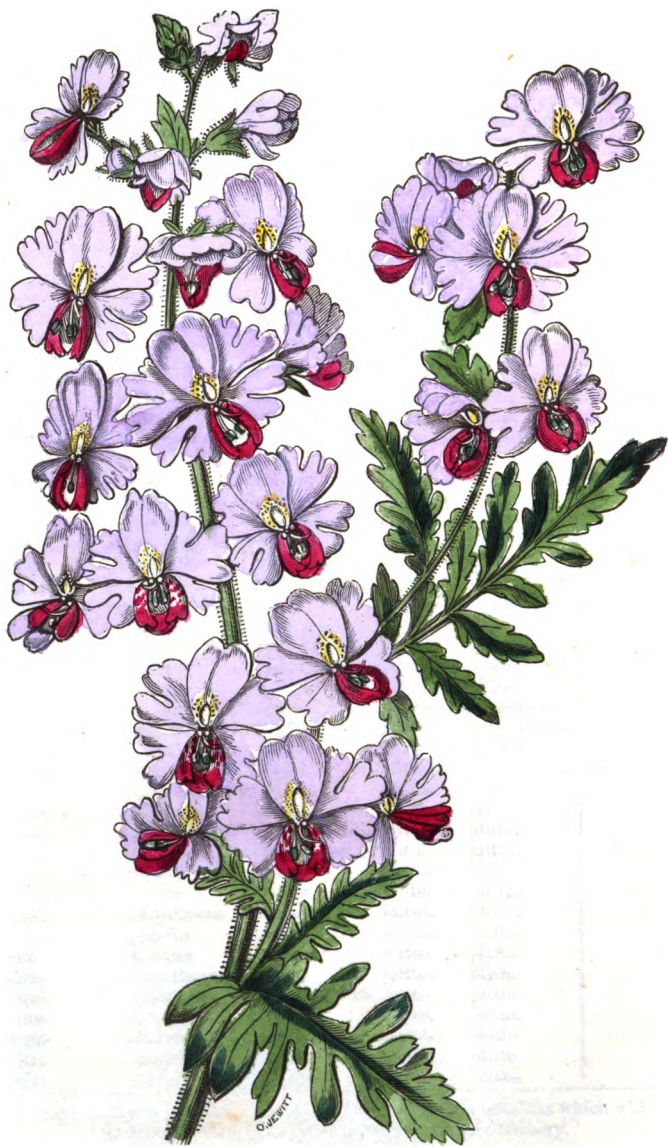
PLANTS IN FLOWER IN JANUARY,
IN THE NURSERY OF MESSRS. CHANDLER & BUCKINGHAM, VAUXHALL.

Generic Name.	Specific Name.	Colour of Flower.	Shrub, tree, herbaceous, or annual	Stove, Greenhouse, or hardy.	Sweet Scented.
Primula	sinensis	white & pink.	Herbac.	Greenhouse.	
Corræa	speciosa	red.	Shrub.	ditto.	
Ditto	alba	white.	ditto.	ditto.	
Daphne	hybrida	purplish red.	ditto.	Hardy.	SW. SC.
Bauera	rubioides	red.	ditto.	Greenhouse.	
Gnidia	simplex	yellow.	ditto.	ditto.	SW. SC.
Boronia	pinnata	pink.	ditto.	ditto.	
Polygala	cordata	purple & white.	ditto.	ditto.	
Ditto	heisteria	ditto.	ditto.	ditto.	
Ditto	latifolia	ditto.	ditto.	ditto.	
Grevillea	Bauerii	yellowish gr.	ditto.	ditto.	
Ditto	rosmarinifolia	red.	ditto.	ditto.	
Lechenaaltia	formosa	dark orange.	ditto.	ditto.	
Ditto	oblata	orange.	ditto.	ditto.	
Cyclamen	colum	purplish red.	Bulb.	Hardy.	
Ditto	vernum	ditto.	ditto.	ditto.	
Fuchsia	microphylla	red.	Shrub.	Greenhouse.	
Linum	trigynum	yellow.	ditto.	Greenhouse.	
Linum	flavum	yellow.	ditto.	Hardy.	
Jasminum	grandiflorum	white.	ditto.	Greenhouse.	SW. SC.
Acacia	lophantha	yellow.	ditto.	ditto.	
Pimelia	decussata	pink.	ditto.	ditto.	
Epacris	grandiflora	red & white.	ditto.	ditto.	
Ditto	rosea	rose colour.	ditto.	ditto.	
Ditto	nyctalis	white.	ditto.	ditto.	
Coronilla	glauca	yellow.	ditto.	ditto.	
Erica	grandinosa	white.	ditto.	ditto.	
Ditto	gracilis	red.	ditto.	ditto.	
Ditto	Bowera	white.	ditto.	ditto.	
Ditto	cerinthoides	red.	ditto.	ditto.	
Ditto	colorans	white & pink.	ditto.	ditto.	
Ditto	mammosa	pink.	ditto.	ditto.	
Ditto	mutabilis	ditto.	ditto.	ditto.	
Ditto	multiflora	white.	ditto.	ditto.	
Ditto	exurgens	orange.	ditto.	ditto.	

We hope to give a list and description of the beautiful Camellias which will be in flower during the next four months at this Nursery.



As the plant
is a
very common
one
it is not
uncommon
which
is to be
seen of the



Schizanthus pinnatus, HUMILIS.

THE
FLORICULTURAL CABINET,

APRIL 1ST, 1833.

PART I.
ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Ranunculus.* By
MR. C. R. CARR.

Seeing by your Introductory Remarks in No. I. of the *Florist's Magazine*, that it is your anxious wish to obtain and spread the knowledge of any successful results in the culture and management of flowers, I herewith send you the details of my mode of treating that most lovely plant, the *Ranu'nculus asia'ticus*, or garden *Ranunculus*, which I cultivate to the extent of many thousand roots. The plan I here detail is what I have practised for some years ; it has never failed of affording me an exhibition of vigorous fine headed flowers ; and to view my beds when blossoms are in perfection, displays in miniature the closeness and evenness of a fine field of corn, with all the varied brilliancy of colours which comprise my stock of thousands of flowers out at the same time.

It is a widely circulated, and an old entertained opinion, that the flowers will become exhausted in a few years if planted in the same sort of soil ; but I hesitate not to say, if treated as stated below, that they will progressively improve.

The piece of ground I select in which to plant my roots is nearly level ; this I choose for the purpose of receiving and retaining a regularity of moisture which very sloping ground does not admit. The soil is from eighteen inches to two feet deep, it is a strong loam upon a dry sub-soil. About the middle of October, I form my bed, making it about three feet broad, when much wider it is difficult to reach to flowers near the middle of the bed ; having trenched it over, and levelled the surface, I take night

E

soil fresh from the privy, and spread it entirely over the bed about half an inch deep; this I leave exposed, the rains of autumn and winter wash it down into the soil below before the planting season arrives.

About the first week in March, when the weather permits, (if not then, as early afterwards as possible) I prepare for planting. I now stir over the surface of the bed, digging it not more than two inches deep. This is of importance to the success of the plants. I have invariably found that when the soil of the bed was lightened up much depth at this time, that a bad bloom (if any) was sure to be the consequence; but when left as firm as it settles to from October to March, and only the surface turned over as above stated, no uncertainty followed, but a regular vigorous bloom was obtained. After the soil is turned over and levelled, I draw drills lengthways of the bed, each about one inch and a half deep, and four inches apart in the rows. I have seven rows in a bed, and the outer rows are six inches from the sides. After the rows are drilled, I sprinkle in the bottom of each a small portion of sifted road scrapings of a sandy nature, or river sand. I then place my roots in the drills at one inch and a half apart, and sprinkle a little more sand or gravel over the claws and crowns of the roots. In covering the roots, I am very careful to do it with soil of a similar kind not sifted at all, but broken fine by the spade. I cover the crown of the roots EXACTLY one inch and a half deep, this I ascertain by placing a few levelling stakes before covering, and smoothen over the bed with the back of the spade. I have uniformly found that when the roots were covered as deep as two inches, that a production of roots above the crown of the old roots was the consequence, and the old roots perished; from which circumstance no bloom appeared that season, and the young roots generally decayed before taking up time. Nothing more is required to be done to the beds till the leaves of the plants are all above ground, when on a dry day, the soil which will have been lightened up by occasional frost, and by the leaves and stalks protruding through the surface, must now be pressed very closely and firmly by the hand about the roots. In dry weather the beds will require watering. I never pour water upon them in the broad cast manner, for if so applied the plants are certain to sustain injury. I am always careful to pour it between the rows, and not to touch the foliage.

Early in May I begin to shade my beds by an awning spread over a fixed frame, four feet high at the sides, and six at the centre; this covering is taken off at nights, and on all cloudy days, to prevent the plants being drawn up weakly, and thus render the stems unable to support the flowers. When the flowers are expanded, the covering is kept over day and night, and when required, I have a protection for one or both sides so as to screen from the injury of either sun or rain.

After the flowers have decayed no water is given, but the roots are allowed gradually to mature. When the foliage is nearly withered, I take up the roots, retaining a little soil to each, this prevents them drying too rapidly. I place them in a warm airy room till the soil adhering is quite dry. I then pick them clean, and separate the offsets from the parent roots, and keep them in an open drawer with ribbed bottom and sides, having the drawer kept where frost or damp cannot affect the roots.

C. R. CARR.

March 2nd, 1833.

ARTICLE II.—*Observations upon the treatment of a Plant of Passiflora edulis, &c. with an account of its produce of fruit, &c.* By MR. SHARMAN, Syston Park, near Grantham.

In April 1830, I planted out a very small seedling plant of *Passiflora edulis* in a border at the back wall of a plant stove. The border is two feet six inches wide, and the same depth, and is continued the length of the stove. The soil is equal parts of loam, leaf mould, and earth from decayed vegetables, the refuse of the kitchen garden. The plant grew very rapidly, and produced seven hundred and eighty four fine fruit the first summer, the last fruit was gathered in December. I then desisted from giving the plant any water for about a month. After that time I cut the shoots well in, and gave the plant a great supply of water, it then made very vigorous shoots which covered the back wall, both ends of the stove, and nearly met along the front. It was also trained under the glass so as to cover the back walk, the shoots hanging pendant for four or five feet. It had a very singular and highly beautiful effect when loaded with its fine brown fruit, the size of an egg. This afforded a supply for desert for about five months.

Being desirous of giving the plant a greater space for its growth, and thus afford us a longer succession of fruit, I therefore took a square out of the partition, and trained a shoot into the greenhouse, which has now nearly covered the back wall, and has there produced upwards of three hundred fruit, some of which are not now quite ripe. The plant has this season produced more than one thousand fruit. It now covers a space on the back wall of seventy feet long by fourteen feet high, in addition to the ends of the stove, &c., as before stated, and has thus extended itself in less than three years.

To insure a good crop of fruit, the first flowers which appear in April should be impregnated. The plant is remarkably clean, never having

seen an insect upon it; the leaves are used for garnishing, and the fruit very much valued, being of a peculiar delicious flavour.

I have a plant of *Passiflora quadrangulæris* planted in a corner of a bark bed in the same plant stove; it has ripened its fruit, each weighing two pounds and a half, but the flavour of them was much inferior to the *edulis*. The *Combretum purpureum* in the same bark pit flowers all the year round. The *Alpinia nutans* turned out in another corner of the pit has bloomed superbly, sending up six or seven very strong spikes of flowers at the same time.

About three years since I turned out into a border in the Conservatory here, a plant of *Brugmansia suaveolens*, it is now twelve feet high, and has from three to four hundred flowers at the same time. The *Azalea indica*, *alba*, *hybrida*, *phænicea* are also turned out in the same borders and they have grown amazingly, and are for a considerable season one mass of flowers. The soil of the border is equal parts of loam and peat, the bottom well drained.

JOHN SHARMAN.

Syston Park, near Grantham, Feb. 20, 1833.

ARTICLE III.—*On the Cultivation of Bouvardia triphylla, and Bouvardia Jacquini.* By Mr. JOHN FERGUSON.

There are no plants more deserving of cultivation in the Flower Garden than *Bouvardia triphylla*, and *Bouvardia Jacquini*, flowering most profusely in the open borders, and their very graceful trumpet shaped flowers, formed in trusses, render them peculiarly suitable for ornamenting a flower garden. The duration of their flowering season is from June till November, and the nearer they approach the end of the season the more abundantly they blossom, and the more splendid is the appearance.

Two quite distinct plants are about in the country under the name *Bouvardia triphylla*, one has smooth glossy dark green leaves, the other sort has foliage of a much paler green and very pubescent, (downy) and the leaves are less than the smooth sort. In the Botanical Register t. 107, the latter sort has been described as *Bouvardia triphylla*, variety, *pubescens*; but since it was inserted in that publication, it has been distinguished as a species, and denominated *Bouvardia Jacquini*; the latter sort is the most free in flowering, but the blossoms of the other are of a more lively scarlet colour. Either sort is easily propagated by cuttings inserted in sandy loam, and placed in a frame on a slight

hot-bed ; the best cuttings for the purpose are young shoots about three inches long, taking them off close to the old wood, these are potted off when struck, singly into small 60 sized pots, and are kept growing in the greenhouse during summer.

About the end of April or first week in May, if danger from frost is not apprehended, I turn the plants out of the pots with entire balls, into flower beds having a very rich light soil. The *Bouvardia triphylla* grows higher than the other sort, I therefore plant two or three rows at the middle of a bed with that kind, and the other rows with the *Jacquinnii*, this arrangement of the plants gives the bed a very superior appearance to a flat surface. When I plant only one sort in a bed, I plant the tallest in the middle, and lesser ones at the sides ; this is easily effected by cutting in the old plants more or less as required for the purpose. Plenty of water is given the plants during the summer season. When at the end of the summer frost is apprehended, I take up the plants out of the beds retaining all the soil and roots I can with each plant, then pot them in a good rich soil, and after being well watered, I take them into the greenhouse. Here they generally flower till the end of the year. When I wish to increase the number of plants, I put a few of the old plants into a little heat either in a stove or hot bed, about the end of March ; when the shoots have pushed a desirable length for the purpose, they are taken off and otherwise treated as above described.

Feb. 22d, 1833.

JOHN FERGUSON.

ARTICLE IV.—*On cultivating the Lupinus muta'bilis.*

By Mr. F. F. ASHFORD, Head Gardener to P. L. BROOKE, Esq., Mere Hall, Knutsford, Cheshire.

The *Lupinus muta'bilis* was introduced into this country in 1819. It grows from four to six feet high and spreads proportionably. The flowers are of a pale blue at first, changing to yellow. Whether the beauty of the flowers, their fragrance, or the handsome foliage of the plant be regarded, each alike renders it highly deserving of general cultivation.

In the mode of treatment I pursue, it becomes a most beautiful shrub for planting out singly upon lawns, flowering for several successive years. Humbly hoping that a description of my practice may be in some degree useful to a portion of the readers of the *Floricultural Cabinet*, I transmit it for insertion therein.

In the beginning of March I sow the seeds in pots of good rich light soil, plunging them up to their rims in a frame upon a fresh hot bed, keeping the lights closed, and shaded when the sun is powerful, till the

plants make their appearance. I then supply them plentifully with water, and admit a free portion of air, in order to make them strong. When they appear in the second leaf, I pot them off singly into good sized pots and place them in a greenhouse, where they remain till they are grown to about twelve or sixteen inches high.

When the weather is become mild and warm, (say the middle of May) I prepare the places where I purpose planting upon the lawn, or flower garden, by removing the subsoil to the depth of two feet six inches, and about two feet square, filling up each space with prepared soil, composed of equal parts of loam, rotten dung, and peat or leaf mould, the whole well chopped and mixed together. The plants are turned out with their balls entire, the ends of the shoots are pinched off, and a good watering is given to settle the soil round the ball of each plant.

I am now particularly careful to have each plant well secured so that they be not broken by boisterous winds, for if not well fastened, being brittle, they are liable to be much disfigured. I am also attentive to preserve the plants from vermin, as slugs, &c.

In the subsequent treatment I am particular to give them a regular supply of water, for their success entirely depends upon it.

When the flowering is over and frost commences, I take off the extremities of the branches, and protect the plants by means of stakes and mats. The main stems are also particularly attended to, protecting them by binding them round with hay bands, for if this part of a plant is damaged by frost, the plant seldom or ever recovers.

The mats are removed in mild weather, to allow all possible fresh air at such a time ; if this is not done, the buds are apt to push weakly : care however is taken to cover the plants at the approach of frost.

In the spring when all apprehension of strong frost is over, I uncover the plants, and cut each shoot of the preceding summer down to a couple of eyes, the subsequent treatment for the remainder of the season is as above specified.

By the above treatment to *Lupi'nus muta'bilis*, I have seen it flower most profusely and beautifully for many successive seasons.

F. F. ASHFORD.

Mere Hall, Feb. 16th., 1833.

ARTICLE V.—*On the Culture of the Lagerstræ'mia i'n-dica.* By a LOVER OF FLOWERS.

There is no plant that I am acquainted with more deserving attention than the *Lagerstræ'mia i'ndica*, and yet scarcely any plant is more neglect-

ed in its cultivation ; the reason of its neglect can only be accounted for from the circumstance of never having seen it cultivated so as to exhibit its beautiful flowers. I am very confident that every person who has seen it bloom to perfection will agree with me when I state, that it is one of the finest hot house plants, and highly deserving much more attention than it generally receives. It is not very uncommon to find large plants having the appearance of a badly transplanted scotch fir, quite brown, and totally destitute of blossom year after year. However I can most confidently state that if the following mode of treatment be practised, it will amply repay for the trouble, by a profusion of lovely, simple, elegant flowers.

Lagerstræmia indica is a deciduous plant, consequently it undergoes internal and external changes to a greater degree than if it had been an evergreen ; in consequence of which the plant in October is removed from the hot house to a cool place in a green house and there kept in a dormant state till the first week in February. I then turn the plant out of the pot and partly disroot it. I afterwards re-pot it, using a rich sandy loam, and then plunge it in a hot bed frame at from 60 to 70 degrees of heat.

As the young shoots advance in length, air and water is admitted according to the state of the atmosphere. The plant is kept growing in this temperature until May, when the heat is raised to 70 or 80 degrees which soon cause it to produce blooming buds in abundance. As soon as these appear a little perfected, the plant is removed to the plant stove or conservatory, where the flowers exhibit themselves to the admiration of all who view them.

When the blooming is over, the plant is again removed to a hot bed frame, which causes the foliage to assume a beautiful green hue, which if not done, the foliage would soon be very brown. I have had plants in blossom from June to October, by taking them into frames successively and otherwise treated as above. The sized pots I use are small thirty-twos. Plants are easily increased by cuttings, taking off young shoots in May, before the blossoms appear, inserting them in sand and loam, and plunged in a hot bed frame, shading when necessary, they very soon take root, and are treated in all respects as otherwise described.

Feb. 5th. 1833.

A LOVER OF FLOWERS.

ARTICLE VI.—*On the treatment of the Mimosa pudica or Humble Plant.* By Mr. J. ROCK.

The *Mimosa pudica*, or Humble Plant, I often notice cultivated in stoves, but have not seen it grown in any other place anything near the

state of perfection it arrives at with me. I scarcely ever saw a plant elsewhere more than one foot high, whilst I have every season plants that attain from two to three feet in height, and spread proportionably. The beautiful foliage, singularity of its closing and dropping to the touch are not all the attractions my large plants have, for they bloom finely for months together, having upwards of a hundred heads of its fine white blossoms out at the same time.

The following is my mode of treatment. I sow the seeds about the first week in February in a pot of light rich soil, and place it in a hot bed frame. I sow three seeds in a 24 sized pot. When the plants are up about an inch high, I pull up all but one; this I allow to grow in the frame till it is several inches high, and becomes a spreading plant.

It may not be amiss to notice, that I have never found the plants to succeed well when transplanted out of the seed pot.

On the first of June I removed the plant into a green house where it flourished till the middle of September, it was at that time taken into a pine stove, and placed upon the pit wall, the heat of which was kept at from 60 to 65 degrees. At the end of January I commenced forcing cucumbers and melons; as soon as the violent heat had subsided, I put the *Mimosa* into the frame giving it a pot two sizes larger, where it remained till April; it was then taken into a vinery, kept at from 68 to 72 degrees, and during the summer attained the size and beauty above stated. Although I have only described the treatment as applying to the treatment given to one plant, I have several more all of which are equally vigorous. I sow seeds every spring, so that I have a succession of plants for every summer. I have raised plants by taking cuttings from the old plants at their second year's growth, and I find that by this means I can keep them perennial. The old plant usually dies the second winter.

J. ROCK.

Feb. 12th, 1833.

ARTICLE VII.—*On the Culture of the Dahlia.* By VERTUMNUS.

The floral world are considerably indebted to you for the production of your little Work on Floriculture; a work at the moderate price of your publication being much wanted. I subjoin a few remarks on the culture of the Dahlia, (suggested by the communication of your Nottingham Correspondent,) which I shall be happy to see in your next, if you think them worth notice.

His method must of course answer very well, if extensive propagation be not the object; but in the case of new and scarce sorts, would hardly supply a sufficient number of plants.

It is, of course, well known to most of your readers who cultivate this flower, that the usual course is to keep the parent stool in heat, taking off the shoots as they arise, until a sufficient supply is obtained. A ridge of bark is the best for this purpose, as it retains the heat longer than dung; but a dung bed is far preferable to strike the cuttings in, which will bear almost any heat, if ventilation is also attended to.

The best time to take off the cuttings is when they have become slightly ligneous, but before they have become hollow, or, as it is termed, "pipy," in which state they are extremely difficult to strike. I invariably find that in dividing a long cutting into two, the part next the old root strikes long before the top of the same shoot—a satisfactory proof that my idea is correct.

A stiff clayey loam will, to a certainty, produce the finest flowers, though probably not in such abundance. This fact I have in many instances seen demonstrated.

As to manure, I consider it should not (if the soil be not materially exhausted) be applied at the bottom, as it tends to cause such a luxuriant growth, that the plant runs to wood without producing a satisfactory show of bloom. But when the plants begin to exhibit signs of flowering, it may be then advantageously applied at the top, either in the shape of manured water, or by placing a quantity of dung close round the stems, and conveying its invigorating powers to the roots by means of the watering pot. This has also the advantage of keeping the ground about them moist, in which they much delight. I find a little peat mould (such as heaths grow in) materially tends to the development of stripes or spots in such flowers as possess these properties.—This should be mixed with the soil in the bottom of the hole in which they are planted. Allow me to add, that plants raised by dividing the root, will make a much more plentiful supply of shoots the next year than those raised from cuttings; every dormant eye in the old root forming a crown, round which the eyes of the following year will be found to rise.

London, March 1st, 1833.

VERTUMNUS.

P.S. It may perhaps be an acceptable hint to some of your readers, who may not have the best convenience for wintering these roots, to take care to have duplicate plants in pots, which should remain there all the winter; these plants will generally survive when the large roots are destroyed.

PART II.

REVIEWS.

The general Management and Propagation of Stove, Green-house, and Hardy Herbaceous Plants, Hardy Trees and Shrubs, with the Soils best suited to their growth. By Mr. JOSHUA MANTELL, Surgeon. Octavo, 35 pages. 5s. 0d.

It appears to be the object of the author of the work before us, to describe the best mode of propagating plants, and to give a description of the soil best suited to the growth of each. To effect this, very considerable pains have been taken to extract from other publications only such portions as are really useful; these, with the author's own concise and valuable remarks, comprise more Floricultural information than we believe is given in the same limits in any other work.

In addition to general directions for the culture of plants in each department, as the title of the work imports, alphabetical tables are given descriptive of the soil suited to each genus of plants, and of the best mode of propagation. The author assumes that every SPECIES of each GENUS requires the same treatment, and the tables are thus arranged. We do not agree with the author in this particular; for although with a number of the genus's of plants it may be correctly applied, yet both the mode of propagation and suitable soil which some species require, is very different from others in the same genus. However, as much is effected in the limits of the work as probably could be done.

The number of species included in the genus's, for which soil and propagation directions are given, is about thirty thousand. We also think the classification of the plants, "as given in a diagram," might be improved.

In giving a description of the tables, we shall quote the author's own instructions. There are descriptions given of 14 kinds of soil, each indicated by a capital letter, and 21 modes of propagation described by figures. The following is an illustration:—Abròma, among Stove plants, opposite to this we find 1.6. E. On referring to the modes of propagation, it is stated, the plant may be raised 1 by seeds, 6 by cuttings of the young wood, planted in sand under a bell glass, and placed in a shady part of a Green-house, or Stove. Under soils, E indicates equal parts of loam and peat, as proper soil for the growth of the genus. A indicates annual, B biennial, H hardy, T tender, G green-house, S stove. Annuals and Biennials being generally propagated by seeds, their habits and places of habitation are only given. After the tables, very useful methods of cultivating several particular genus's of plants—as Dahlia, Rose, Carnation, Tulip, &c. are given. We cordially recommend the work to our readers, particularly to young gardeners, apprentices, &c.

Plants figured in the following Periodicals for March, 1833 :—

Botanical Magazine. By MR. CURTIS and DR. HOOKER. Price 3s.6d. coloured.

1. *Gongora atropurpurea*, dark flowered, class Gynandria; order, Monandria; natural order, Orchidæ. This rare plant was introduced by CHARLES PARKER, Esq., into the Liverpool Botanic Garden, and brought from Demarara. It is stated to be the same species as the *G. atropurpurea* figured in the Exotic Flora, from Trinidad. Flowers of a brown purple, or chocolate colour, slightly spotted with dark brown spots. Culture: thrives when planted in rotten wood, increased by division of plant. *Gongora*, in honour of A. C. GONGORA, a Spaniard.

The present plant is closely allied to the genus, *Cirrhaea* of MR. BROWW, the latter genus includes the *Cymbidium dependens* of MR. LODDIGES, and DR. HOOKER's *Gongora viridipurpurea*, and MR. LINDLEY attributes a stigma occupying the apex of the column, and the anther situated at the back of the column; but whatever may be the case with the *Cirrhaea Loddigesii*, (*Cymbidium dependens*) DR. HOOKER states that in the *C. viridipurpurea*, the proper situation of the anther is to be terminal, though frequently when detached it is suspended at the back of the column; the same peculiarity is observed in *G. atropurpurea*.

2. *Coburgia fulva*, tawny coloured, Hexandria, Monogynia. Amaryllidææ. This plant is grown in the fine collection of JOHN WILLMORE, Esq., Oldfield, near Birmingham. It is probably a native of South America. Flowers, of a tawny orange colour. Culture: it thrives in rich mould and peat, in a temperature of 45 degrees; propagated by parting the bulbs. *Coburgia*, in compliment to PRINCE LEOPOLD OF SAXE COBURG, now King of Belgium.

3. *Myrsine capitellata*, cluster flowered, Pentandria, Monogynia. Myrsinææ. A stove plant, the flowers are yellowish green, of very little beauty, the foliage is large and handsome. The plant was brought from Nepal in 1828. It thrives in peat and loam, and is increased by cuttings. *Myrsine*, a Greek name, synonymous with Myrtle.

4. *Eugenia trinervia*, three nerved, Icosandria, Monogynia, Myrtaceæ. A much branched green house shrub from New South Wales in 1824. Flowers, white, very small. Culture: it thrives in sandy peat, propagated by cuttings. *Eugenia*, in honour of PRINCE EUGENE OF SAVOY, a patron of Botany.

5. *Symplocarpus fe'tidus*, stinking skunk weed, or skunk cabbage; Tetrandria, Monogynia. Aroidææ. It is a native of North America, consequently perfectly hardy; it was introduced in 1735. Flowers, outside of spathe yellow spotted with purple, inside blackish purple. Culture: common garden soil, increased by seeds. *Symplocarpus*, from *scemploke*, an union, and *karpus*, fruit, from their being combined with the receptacle into one body.

6. *Begonia reniformis*, kidney leaved, Monæcia, Polyandria. Begoniaceæ. This plant is probably a native of Brazil, it is a stove plant. Flowers, white, very small, transparent. Culture: thrives in peat and loam, propagated by cuttings. *Begonia*, in honour of M. BEGON, a French promoter of Botany.

7. *Ledebouria hyacinthina*, hyacinth like, Hexandria, Monogynia. Smilacinaæ. A small bulbous stove plant, a native of the East Indies, growing in moist pasture grounds, where the ends of the leaves curve backwards, touch the soil, take root, and produce new bulbs. Flowers, small, greenish white. Culture: rich mould and bog soil, increased by offsets. *Ledebouria*, in honour of F. F. LEDEBOUR, Author of *Flora Altaica*.

Botanical Register. By J. LINDLEY, Esq. Price, 4s. 0d., coloured.

1. *Crimson creeping Cereus*, Icosandria, Monandria. Cactææ. This most beautiful hybrid Cactus was raised a few years ago by MR. MALLINSON, Gardener to SIR SAMUEL SCOTT, from seed of *Cactus speciosissimus*, fertilized by

Cactus flagelliformis. The flowers are of a fine rosy scarlet, having the brilliancy of colour of its female parent, combined with the prolific constitution and trailing habit of the male. It is a hardy green-house plant. Culture, sandy loam and peat, increased freely by cuttings. *Cactus*, a name applied by Theophrastus to a spiny plant.

2. *Macillária racemósa*, raceme flowered, Gynandria, Monandria. Orchideæ. This rare little *Maxillária* is from Rio Janeiro, sent by Mr. WILLIAM HARRISON. It is very delicate to cultivate even by the most skilful. It has flourished for a short time planted in moss, and suspended in a pot from the rafter of a stove, in the garden of the London Horticultural Society. Flowers, greenish yellow, with a crimson dotted lip. Culture, increased by offsets. *Maxillária*, from the *Labellum* resembling the maxillæ of insects.

3. *Calochórtus titeus*, Hexandria, Trigynia. Liliacæ. It was discovered by Mr. DOUGLAS in California, and sent to the London Horticultural Society's Garden, in 1831; it is a hardy plant. Flowers, two or three, terminal, yellow, with green centre; sepals green. It is a pretty plant flowering in September and October. The blossoms continue unfading for a week or ten days. Culture, it thrives in sandy peat, and is increased by offsets. *Calochórtus*, from *kalos*, handsome, and *chortos*, grass. MR. LINDLEY adds, we refer *Calochórtus* to Liliacæ on account of its apparent affinity to *Fritillaria*; it nevertheless differs in a very remarkable manner in having its sepals distinctly leafy, in which particular it approaches *Commelineæ*.

4. *Duváua ovata*, ovate leaved, Polygamia, Monœcia. Anacardiaceæ. An evergreen shrubby plant from Chili. If trained to a wall and sheltered in winter, it succeeds in the open air, being about as hardy as myrtles. Flowers, very small, octandrous, greenish white. Culture, it will grow in any situation dry in summer, and well drained in winter, increased by cuttings of ripe wood struck in sand under glass in a gentle heat. *Duváua*, so called after M. DUVAU a French Botanist.

5. *Oncidium Harrisoniinum*, MRS. ARNOLD HARRISON's *Oncidium*, Gynandria, Monandria. Orchideæ. This very handsome and distinct species was found on the Organ Mountains of Brazil, by Mr. WILLIAM HARRISON. The plant is easily recognized by its fleshy, slightly channelled recurved leaves, each of which is placed upon a little pseudo bulb. The panicles of flowers are about a foot high, and arranged in a graceful manner. Colour, sepals yellow with dark brown spots; labellum yellow. Culture, planted among moss and rotten wood, it grows freely; increased by division of the plant. *Oncidium* from *Ogkidion*, a tubercle; two prominences on the lip.

6. *Papáver persicum*. Persian Poppy, Polyandria Monogynia. Papaveracæ. Seeds of this Poppy were received by the London Horticultural Society, from Mr. OTTO of Berlin. It is an annual, which would be pretty if its petals were not so quickly deciduous. It grows 1½ feet high, flowers in June and July. Flowers—white, with green at the centre. Culture. It is easily propagated by seeds. Soil—rich mould. *Papáver*, so called, because it was usually mixed with the pap, PAPA, given to children in order to procure sleep. The word *Opium* is derived from the Greek *Opos*, juice; it being the inspissated juice of the Poppy.

7. *A'ster adulterinus*. Glossy Aster, Syngenesia, Polygamia, Superflua. Composite, a native of North America; a hardy perennial, flowering in September; colour, pale lilac; grows 1½ feet high. It increases freely by division of its roots, and will grow in almost any soil or situation. *A'ster*, from a *Star*, resemblance of flowers.

The British Flower Garden.—By Mr. R. SWEET. Monthly, price 3s. 6d. coloured.

1. *Calophanes oblongifolia*, spotted flowered, Didynamia Angiospermia. Acanthaceæ. A dwarf, tufted, herbaceous perennial, with numerous simple, slender, obtusely four cornered stems, about six inches high. It is a very beautiful flowering plant, and well merits extensive cultivation. Flowers,

funnel shaped, somewhat campanulate, fine azure blue, with the lower lobe marked with numerous irregular purple spots. It is a native of Carolina, and has been recently introduced into this country by Mr. DENNIS, Florist of Chelsea. The genus is essentially distinguished by having an ovary with two seeded cells, and the anthers spurred at the base. Culture. It requires loam and peat, and is readily increased by parting the roots.—*Calophanes*, from Kalos, beautiful, and phano, to appear, beautiful appearance.

2. *Bartonia albescent*. White stalked, Polyandria Monogynia. Loasæ.—Discovered originally by Dr. Gillies, occupying dry water courses in Mendoza. The genus is chiefly confined to the western regions of North America; this being the only one found in the southern hemisphere. The plant is annual, grows from 1 to 3 feet high, flowers solitary, pale yellow. Culture. Sandy loam, increased by seeds.—*Bartonia*, in honour of Dr. S. BARTON, Professor of Botany.

3. *Eriogonum conchata*. Pencilled Tree Primrose, Octandria Monogynia. Onagraceæ. This very pretty dwarf species is a native of Chile, and was introduced last year from seeds collected in that country, by Mr. CUMING. It is a handsome hardy annual, of easy culture. Flowers, pale rose colour, about twice the size of those of *E. rosea*. Culture. Flourishes in rich mould, and increased by slips or seeds. *Eriogonum*, from Oinos, wine, and theron, a catching; acquired smell.

4. *Liätis odoratissima*. Vanilla scented Liätis, Syngenesia Polygamia Æqualis. Compositæ. A hardy perennial, native of Carolina. It was cultivated in this country twenty years ago; but the plant had disappeared, until introduced last year by Mr. DENNIS, Grosvenor Row, Chelsea. The plant possesses a delightful fragrance, resembling recently cut hay, which is diffused some distance. Flowers—purple, numerous; flowering from September to November. Culture. It requires a peat soil, and to be freely supplied with water when growing; it is readily increased by parting the roots. *Liätis*, meaning unknown.

The Botanic Garden. By Mr. B. MAUND. Monthly. 1s. 6d. large; 1s. small. Coloured.

1. *Neja gracilis*, slender neja, Syngenesia, Superflua. Compositæ, from Mexico. Hardy perennial, introduced in 1828, grows one foot high, flowers in August, September. Flowers, yellow, which are produced abundantly.—The word *Neja* without meaning.

2. *Zinnia tenuiflora*, narrow petaled zinnia, Syngenesia, Superflua. Compositæ, from Mexico. Hardy annual, introduced in 1799; grows two feet high, flowers in July, September. Flowers, crimson; continues long in flower. It requires a warm situation, and a rich loam soil. The name *Zinnia* is derived from that of Dr. JOHN GODFREY ZINN, Professor of Botany.

3. *Phlox Wheeleriana*. Wheeler's phlox, Pentandria Monogynia. Polemoniaceæ, Hybrid origin. Hardy perennial, raised in 1824; grows three feet high; flowers in June, September; colour, rose. *Phlox* is a Greek word, signifying flame; *Wheeleriana* is a name given to this hybrid plant after that of the person who raised it, Mr. WHEELER, nurseryman, of Warminster.

4. *Eryngium Bourgati*, Bourgatis, Eryngo, Pentandria Digynia. Umbelliferae, native of the South of France; hardy perennial, introduced in 1731; grows two feet high; flowers in July; colour, pale blue. The word *Eryngium* is from *Erygano*, to belch, expels wind. *Bourgati*, from the name of an eminent theologian and naturalist of Switzerland.

PART III.

MISCELLANEOUS INTELLIGENCE.

A SELECT LIST

OF GREENHOUSE PLANTS WHICH WILL FLOURISH AND BLOOM FREELY DURING
THE SUMMER MONTHS, IF PLANTED OUT IN THE OPEN BORDERS.

Within a few years the brilliancy of modern ornamental gardening has been most surprisingly increased by the practice of planting out in the open borders many of the most splendid and free flowering green-house plants. By this means a very considerable number of showy exotics are caused to blossom much more profusely than under any other mode of cultivation.

Some of the kinds of plants are much more suited for growing in masses, "as a bed of each," than others are; such we have marked with a star, and those which will thrive best in the air and smoke of towns, with two stars.

The kind of soil each particular plant will flourish and bloom the best in, is annexed to them. We have found, during twenty years' practice in this department of Floriculture, that some plants when turned out of pots into the open borders, even in common soil, have a tendency to produce a luxuriant foliage, and but very few blossoms; such luxuriance, however, is easily prevented, by using a mixture of sand or peat with the common soil.

In the list of plants here given, we have only inserted such as keep in bloom for several successive months; there are many other beautiful plants, as *Gladioluses*, *Ixias*, *Watsónias*, and new *Azaleas*, *Rhododéndrons*, &c. that will flourish and blossom equally well; but their blooming season being so short, and at so early a season of the spring, as to be liable to injury, we have on that account omitted them. *Pelargóniums* are also omitted; the number of varieties, species, and colours being so extensive, we could not possibly particularise them within our limits. All the kinds, however, will flower freely in the open borders. Those of a luxuriant habit should be planted in sandy loam and peat, to prevent a mass of strong roots and foliage, and cause the production of flowering shoots; and others of a more delicate habit, should be grown in rich vegetable mould, from decayed leaves, &c. and peat soil.

The period for turning out plants into the open borders, varies with the situation of climate, season, &c.; but it is better to be a week too late than run the risk of early destruction. We purpose giving some directions before the Autumn, relative to the best means of keeping up a stock of plants for the open borders.

BLUE FLOWERS.

<i>Agathæa cœlestis</i> , 1ft. 6in.,	May, November, peat and loam.
Ditto <i>linifolia</i> , 2ft.,	April, October, do.
** <i>Anagallis Monelli</i> , 1ft.,	May, October, do.
** Ditto <i>Webbiana</i> , 1ft.,	do. do. do.

- * *Cælestina ageratoides*, 1ft., June, October, rich mould.
- * Ditto *cærulea* 1ft., June, September, do.
- * *Commelina cyanea*, 1ft., July, September, do.
- * *Heliophilla linearifolia*, 1ft., June, September, sandy peat.
- ** *Heliotropium corymbosum*, 2ft., May, October, rich mould.
- * *Hydrangea hortensis*, 1ft. to 2ft., June, October, peat and pure loam.
- * *Lobelia begoniaefolia*, 6in., June, September, do.
- ** Ditto *Erinus*, 6 in., June, September, sandy peat.
- * Ditto *senecioides*, 1ft., July, September, rich mould.
- * *Salvia africanus*, 2ft., May, September, do.
- * Ditto *angustifolius*, 2ft., June, September, do.
- * Ditto *chanædryoides*, 1ft. 6in., June, October, rich mould.
- * *Streptocarpus Rëxii*, 6in., April, November, loam and peat.
- * *Witsénia corymbosum*, 1ft., May, October, sandy peat.

CRIMSON.

- Alstræmeria psittacina*, 4ft., August, October, loam and peat.
- Azalea indica*, var. *ignescens*, 2ft., May, September, (see page 8.)
- Amaryllis formosissima*, 1ft., May, September, rich mould.
- Ditto *Forbesii*, 1ft., 6in., July, September, do.
- Ditto do. *purpurea*, 1ft. 6in., July, September, do.
- ** *Calceolària Wheeleri*, 1ft., May, October, peat and loam.
- Càphea Llæva*, 1ft. 6in., June, August, do.

VERY DARK.

- ** *Calceolària Yoàngii*, dilécta, 2ft., May, October, rich mould.
- * Ditto do. *àtra*, 2ft., May, October, do.
- ** Ditto *Epsomiana*, 2ft., May, October, do.
- Lobelia mucronàta*, 2ft. to 3ft., July, September, rich mould and peat.
- ** *Lótus Jacobæus*, 2ft., May, November, rich mould.

GOLDEN.

- Galàxia grandiflora*, 6in., May, September, sandy peat.
- Hunnemània fumarifolia*, 2ft., June, September, rich mould.
- * *Mesembryanthemum àureum*, 1ft., May, October, do. and lime rubbish.

ORANGE.

- ** *Calceolària Fothergilla*, 6in., May, October, rich mould and peat.
- Homèria collina*, 2ft., May, August, sandy peat.
- * *Lechenaùtia formòsa*, 1ft., June, September, peat and loam.
- * Ditto *oblàta*, 1ft., June, September, do.
- ** *Ly'chnis grandiflora*, 1ft. 6in., June, October, rich mould.
- * *Mahèrnia pulchèlla*, 2ft., July, September, loam and peat.
- * *Mesembryanthemum auràntiacum*, 1ft. 6in., June, September, rich loam and lime rubbish.
- * Ditto *bicolòrum*, 1ft. 6in., May, September, rich loam and lime rubbish.
- ** *Mimulus glutinòsus*, 2ft., May, October, rich mould.

PINK.

- Alstræmeria pallida*, 2ft., August, October, loam and peat.
- Chirònia linioides*, 2ft., June, September, sandy peat.
- * *Cròwea saligna*, 2ft., June, October, sandy peat and loam.
- * *Eròdium incarnàtum*, 6in., May, August, rich mould.
- * *Linum suffruticòsum*, 1ft., August, October, peat and loam.
- * *Mesembryanthemum floribunda*, 6in., May, October, sandy loam.
- ** *Primula præ'nitens* (*sinénsis*) 1ft., May, October, sandy loam.
- Stevia lúcidà*, 2ft., June, October, peat and loam.
- Ditto *salicifolia*, 1ft. 6in., July, September, peat and loam.
- * *Tephrosia grandiflora*, 3ft., May, October, do.

PURPLE.

- ** *Calceolària arachnoides*, 1ft. June, October, loam and peat.
- ** Ditto *purpùrea*, 1ft., June, October, do.

- * *Calceolària insignia*, 1ft. 6in., June, October, sandy peat.
- ** *Chirónia frutescens*, 1ft. 6in. June, October, peat and loam.
- ** *Cinerària cruenta*, 2ft., May, July, do.
- * Ditto *lanata*, 2ft., May, September, do.
- ** *Lobelia speciosa*, 2ft., May, October, do.
- ** Ditto *unidentata*, 6in., May, October, do.
- * *Loddigesia oxalidifolia*, 1ft. 6in. May, October, do.
- ** *Lòtus atropurpureus*, 1ft., May, November, sandy loam.
- * *Mesembryanthemum violaceum*, 2ft., June, October, rich loam and lime rubbish.
- ** *Oxalis speciosa*, 6in., August, October, sandy peat.
- * *Sálvia Grahàmi*, 3 to 4ft., June, October, sandy loam.
- ** *Senecio elegans*, purpurea, 1ft. 6in., May, October, rich mould.
- ** Ditto *venustus*, 1ft. 6in., June, October, do.
- Talinum teretifolium*, 1ft., August, October, sandy loam.
- * *Verbena intermedia*, 1ft., June, October, rich mould.
- * Ditto *pulchella*, 1ft. June, September, loam and peat.

RED.

- Chirónia decussata*, 1ft. 6in., June, October, sandy peat.
- ** *Fuchsia microphylla*, 2ft. to 4ft., May, October, rich mould.
- ** Ditto *thymifolia*, 2ft. to 3ft., May, October, do.
- Málva elegans*, 2ft. to 3ft., May, September, loam.
- * *Manùlea rubra*, 1ft. 6in., May, October, peat and loam.
- ** *Oxalis Déppeii*, 6in., May, November, sandy peat.

ROSE.

- ** *Chirónia trinerva*, 1ft. 6in., May to September, sandy peat.
- ** *Fuchsia bacillaria*, 2ft. to 4ft., May, October, sandy loam.
- ** *Francòla appendiculata*, 2ft., July, September, peat and loam.
- ** *Hydrangea hortensis*, 1ft. to 2ft., June, October, rich loam.
- ** *Oxalis floribunda*, 6in., May, October, sandy peat.
- ** Ditto *Bowéii*, 6in., May, October, do.
- Sálvia involucrata*, 4ft. to 10ft., July, September, rich mould.
- ** *Swainsonia galegifolia*, rosea, 2 to 4ft., June, September, sandy peat.
- Verbena venosa*, 2ft. 6in., May, October, sandy loam.

WHITE.

- Alòysia citriodora* 2ft. to 3ft., May, October, rich loam.
- * *Aretòtis bicolor*, 1ft., July, October, loam and peat.
- * *Chirónia frutescens*, albiflora, 1ft. 6in., June, October, loam and peat.
- Cinerària alba*, 1ft., June, August, loam and peat.
- ** *Heliotropium peruvianum*, 2ft., June, October, rich mould.
- ** *Lobelia maculatum*, 6in., May, October, rich mould.
- * Ditto *rugulosa*, 2ft., May, September, do.
- ** *Manùlea (Büchnera) pedunculata*, 1ft. 6in., June, November, rich mould.
- * *Mesembryanthemum splendens*, 1ft. 6in., June, October, rich mould and lime rubbish.
- ** *Primula prænitens*, alba, 9in., June, October, rich mould and peat.
- Polianthus tuberosa*, 2ft. to 4ft., July, September, rich mould.
- ** *Senecio elegans*, alba, 1ft. 6in., June, October, rich mould.
- ** *Swainsonia galegifolia*, albiflora, 2ft. to 3ft., June, September, rich mould.

YELLOW.

- ** *Aretòtis speciosa*, 1ft. 6in., June, September, peat and loam.
- ** *Calceolària angustiflora*, 1ft. 6in., June August, do.
- ** Ditto *bicolor*, 2ft., July, October, do.
- ** Ditto *corymbosa*, 1ft., May, September, do.
- ** Ditto *Hibbertiana*, 2ft., May, October, do.
- ** Ditto *Hopeana*, 1ft. 6in., May, October, do.
- ** Ditto *integrifolia*, 2ft., August, October, do.
- ** Ditto *Morrisoni*, 2ft., May, October, do.

- ** Calceolària pèndula, 1 to 2ft., May, October, peat and loam.
 - ** Ditto plantaginea, 1ft., August, September, loam and peat.
 - ** Ditto paniculàta, 1ft. 6in., June, October, rich mould.
 - ** Ditto polyántha, 3ft., May, October, do.
 - ** Ditto polifolia, 1ft., June, October, do.
 - ** Ditto rugosa, 2ft., June, October, do.
 - ** Ditto scabiosæfolia, 2ft., May, October, do.
 - * Chorizema nana, 1ft., May, October, sandy peat.
 - * Commelina africàna, 1ft. May, October, rich mould.
 - * Erinus fràgrans, 6in. May, July, sandy loam.
 - Fuxènia gràta, 2ft., June, September, peat and loam.
 - * Genista canariensis, 2 to 3ft., May, October, rich mould.
 - Helianthemum polygalifolia, 9in. June, August, sandy loam.
 - * Hermànnia glandulosa, 2ft. May, September, do.
 - * Hibbertia cistifolia, 1ft., May, September, do.
 - * Ditto flexuosa, 2ft., May, September, do.
 - ** Lium trigynum, 2ft., May, October, do.
 - ** Lótus anthylloides, 1ft., June, October, do.
 - ** Ditto jacobæus, var. luteus, 2ft., May, October, rich mould.
 - Trachymène lineàris, 2ft., June, September, do.
- SCARLET.
- ** Alonsa (Hemimeris) acutifolia, 2ft., May, October, rich mould.
 - ** Ditto incisifolia, 2ft., May, October, sandy loam.
 - ** Ditto intermedia, 2ft., do. do. do.
 - ** Ditto lineàris, 1ft. 6in., May, October, rich mould.
 - ** Bouvardia triphylla, 1ft. 6in., May, October, rich mould. (See page 28.)
 - ** Ditto Jacquinnii, 1ft. 6in., May, October, do.
 - ** Fuchsia cónica, 2ft. to 4ft., June, October, sandy loam.
 - ** Ditto coccinea, 2ft. to 3ft., May, October, rich mould.
 - ** Ditto globosa, 2ft. to 3ft., May, October, do.
 - ** Ditto gràcilis, 2ft. to 8ft., May, October, sandy loam.
 - ** Ditto macrostemon, 2ft. to 3ft., July, October, sandy loam.
 - ** Ditto multiflora, 2ft. to 3ft., May, October, rich loam.
 - ** Ditto tenella, 2ft. to 4ft., May, October, do.
 - ** Ditto virgata, 2ft. to 4ft., May, October, do.
 - ** Geum chilense, 1ft. 6in., June, October, sandy peat.
 - ** Lobelia cardinalis, 3ft to 4ft., May, October, rich mould.
 - ** Ditto fulgens, 2ft. to 3ft., May, October, do.
 - ** Ditto splendens, 3ft. to 4ft., May, October, do.
 - ** Mesembryanthemum, coccineum, 1ft. 6in., May, September, rich mould and lime rubbish.
 - * Ditto micans, 1ft. 6in., May, October, rich mould and lime rubbish.
 - * Ditto speciosum, 1ft. 6in., May, October, do. do.
 - ** Salvia coccinea, 2ft., May, October, rich mould.
 - ** Ditto fulgens, 2ft. to 4ft., May, October, do.
 - Ditto mexicana, 2ft., June, September, do.
 - * Ditto pseudo coccinea, 2ft. to 3ft., June, September, sandy peat.
 - ** Ditto splendens, 2ft. to 4ft., July, October, rich mould.
 - ** Senecio speciosus, 6in., June, September, sandy loam.
 - ** Verbena chamædrifolia, (Melindres) 6in., rich mould.
- DARK SPOTTED, STRIPED, &c.
- * Alstræmeria pelegrina, 1ft., May, September, rich mould.
 - ** Calceolària formosum, 2ft., May, October, rich mould and peat.
 - ** Ditto Gellianum, 1ft. 6in., May, October, do.
 - ** Ditto Youngii, 2ft., May, October, do.
 - ** Ditto Youngii palidior, 2ft., May, October, do.
 - ** Ditto fulgida, 1ft. 6in., May, October, do.
 - ** Ditto Martineana, 1ft., May, September, do.
 - ** Ditto Atkinsiana, 1ft. 6in., May, October, peat and loam.
 - * Gazania pavonia, 1ft., June, August, peat and loam.
 - * Ditto rigens, 1ft., May, September, do.
 - Hibiscus hispidus, 1ft. 6in., June, October, rich loam.

CLIMBING PLANTS.

- * *Hibbertia grossulariifolia*, yellow, May, September, sandy peat.

This plant also makes a very handsome appearance, when planted in a bed, and allowed to spread over its surface, the flowers rising about two inches.

- Lophospermum erubescens*, rose, June to November, rich mould.

- Maurandia Barclayana*, dark purple, June to November, rich mould.

- Ditto *antirrhiniflora*, pale blue, June to November, do.

- Ditto *semperflorens*, pale blue, June to November, do.

- Tropaeolum peregrinum*, yellow, June to November, do.

- Ditto *tricolorum*, orange and purple, June to November, do.

Cleanliness is indispensably necessary to the health of plants, consequently plants in gardens situated in cities and towns, or near public roads or streets, will require much attention in watering; for dust and soot falling upon the plants, closes up the pores, and thus prevents them perspiring by day, or inhaling fresh juices by night. To prevent this, the plants should frequently be watered over the tops by means of a watering pot, syringe, or garden engine. At the spring of the year, apply it early in the morning; but when sharp frosts are over, do it in the evening. Whenever a plant requires water at its roots, it is advisable to pour it over the foliage, and thus effect a double benefit. The soil of the border should frequently be stirred by hoeing; thus admitting a free passage for air, water, &c. to the roots. The above attention given to flowering plants, shrubs, &c. will be found successful. Most of the plants in the above list may be procured in large quantities at the principal Nursery establishments in the kingdom.

TENDER AND HARDY ANNUALS CONTINUED.

- Cuphea viscosissima*, purple, 1 ft., July, September, sandy loam.

- Clarkia pulchella*, rose, 1 to 2 ft., June, November, rich loam.

- Do. do. white, var., June, November, do.

- Collinsia grandiflora*, blue and pink, 1 ft., June, November, do.

- Do. *véna*, blue and purple, 1 ft., May, June, do.

- Dianthus*, Indian pink, &c.

- Do. *chinensis*, various colours, as red, purple, rose, pink, white, blush, striped, single and double varieties, July to October, rich loam.

- Eschscholtzia californica*, yellow, 1 to 2 ft., July, October, rich loam; though perennial, it blooms freely sown every spring. Old plants require frame protection in winter.

- Eccremocarpus scaber*, orange red, climbing 10 ft., July, September, rich loam; though not annual, flowers well sown every season.

- Gentiana humilis*, purple, 6 in., April, peaty loam.

- Glacium phoeniceum*, red, 2 ft., June, July, rich loam.

- Do. *tricolor*, red, &c. 1 ft., June, September, do.

- Do. *persicum*, red, 1 ft., July, September, do.

- Gilia capitatum*, blue, 2 ft., June, September, do.

- Do. do. white, var. 2 ft., June, September, do.

- Do. *gracilis*, pink, 6 in., June, July, do.

- Kaulfussia amelloides*, blue, 6 in. to 1 ft., June, September, rich loam.

- Lopèzia pumila*, red, 6 in., July, September, do.

- Do. *coronata*, red, 2 ft., July, September, do.

- Matthiola annua*, stocks, June, November, rich loam; the varieties are numerous, as 48 Russian, 36 German and other varieties; colours, peach, blue, lilac, violet, white, brown, chocolate, scarlet, red, &c. &c.

Mimulus floribundus, yellow, 1ft., August, September, rich loam.

Nicotiana, tobacco.

Do. *sanguinea*, scarlet, 4ft., July, September, rich loam.

Do. *nepalensis*, rose, 4ft., July, September, do.

Do. *braziliensis*, rose, 4ft., July, September, do.

Nolana paradoxa, blue and striped, trailing, July, September, rich loam.

Enothera bifrons, purple and crimson, 1ft. 6in. June, November, do.

Do. *Lindleyi*, rose and pink spots, 2ft., June, November, do.

Do. *rosea alba*, var. rosy white, spotted with red, June, Nov., do.

Do. *Romanzovii*, blue, 1ft., June, November, do.

Do. *tenella*, blue, 1ft., June, November, do.

Do. *purpurea*, purple, 1ft., May, August, do.

Petania nyctaginiflora, white, 2ft., June, October, do.

Salpiglossis picta, various in colour, 1ft. 6in., May, July, do.

Do. *atropurpurea*, dark purple, 1ft. to 2ft., August, October, do.

Do. *Barclayana*, brown and yellow, 2ft., July, October, do.

Schizanthus Hookeri, rosy lilac, 2ft., June, October, do.

Do. *retusus*, yellow, velvet and white, 2ft., June, October, do.

Do. *Grahami*, do. do. 2ft., do. do.

Do. *porrigena*, do. do. 2ft., do. do.

Do. *pinnatus*, do. do. 2ft., do. do.

Do. *pinnatus*, var. *humilis*, 6in. do. 2ft., do. do.

Senecio, Ragwort.

Do. *elegans*, purple, 2ft., June, September, rich loam.

Do. do. white, var. 2ft., do. do.

Do. do. double purple, 2ft., do. do.

Do. do. double white, 2ft., do. do.

Tagetes, French Marigold.

Do. *pátula*, 2ft., June, October, rich loam; varieties numerous, as orange, crimson velvet, striped, and edged, both tall and dwarf.

Do. *erecta*, African Marigold, 2ft. to 3ft., June, September, rich loam, varieties, orange, lemon, and quilled.

Talinum ciliatum, bright purple, 1ft., July, August, rich loam.

Trachymène cœur-dea, sky blue, 1ft. 6in., July, September, sandy peat.

Verbena Aubletia, rosy purple, 1ft. to 2ft., July, September, rich loam.—This plant is biennial, but flowers freely the first season.

Zinnia elegans, violet and scarlet, 2ft., June, September, rich loam.

A LIST OF HARDY ANNUALS.

When the seeds are sown as early as the beginning of March, a great portion is generally destroyed by occasional frost; it is, therefore, advisable never to sow before the end of March, or beginning of April. The following observations upon our practice we transmitted to the Horticultural Society of London two or three years since; they were printed in the Transactions, and since extracted into other works. As some of our readers may not possess them, we shall give them here.

The soil of the border is lightened up and broke fine, then a portion of very finely sifted moist soil is sprinkled over the place; this is levelled; the seeds are then sown and covered with more fine soil; the surface is then moderately pressed, so as to close it to the seeds; this causes them to vegetate quickly and certainly. An inverted flower pot is then placed over the patch sown; this is allowed to remain until the seeds have begun to grow; the pot is then raised up and propped on one side, two or three inches high,

until the plants are able to bear full exposure, when it is wholly removed.— This covering answers several good purposes:—1st. It keeps the soil moist until the seeds have vegetated. 2nd. The Sun operating on the pot, produces a considerable heat, which brings up the seeds much quicker and certain than under other circumstances. 3rd. It protects them from frost. 4th. It prevents the soil from being washed off the seeds, or the seeds being washed away by heavy rains. 5th. It also preserves the seeds from birds or mice.

Addonis, Pheasant's eye.

Do. autumnalis, crimson, 2ft., May to October, rich loam.

Do. flava, yellow, 2ft., June, September, do.

Do. æstivalis, scarlet, 2ft., June, August, do.

Androsace macrocarpa, white, 6in., June, August, do.

Antirrhinum, Snap Dragon.

Do. montevidense, red, 1ft., July, August, do.

Amaranthus, Princess Feather.

Do. hypochondriacus, dark red, 2ft. to 3ft., July, September, rich loam.

Do. caudatus, red, 2ft. to 3ft., July, September, do.

Calendula, pluvialis, white and purple, 1ft., June, August, do.

Do. hybrida, white, 1ft., June, August, do.

Do. stellata, orange, 2ft., June, September, do.

Centaurea bluebottles, &c.

Ditto cyaneus, 3ft., June, September, colours various, as white, flesh, blue, purple, and striped varieties; rich loam.

Chrysanthemum carinatum, white, purple eye, 1ft. to 2ft., July, October, rich loam.

Do. coronarium, 3ft. to 4ft., June, September, colours various, as white, yellow, golden, buff, and quilled, rich loam.

Commelina tuberosa, blue, 1ft., June, July, rich loam.

Do. caelestis, sky blue, 2ft., June, September, rich loam.—These are not annuals, but bloom freely the first season. The old roots may be annually taken up and preserved as Dahlias during winter.

Convulvulus tricolor, striped blue, &c., 3ft., July, August, rich loam.

Do. albiflorus, white, 1ft., July, August, do.

Calliopsis bicolor (*Coreopsis tinctoria*) golden and dark eye, 2ft. 6in., May, September. If too rich a loam, the plant runs too much into foliage, and few flowered.

Do. Atkinsoniana, yellow and brown eye, 2ft., June, November, soil as above.

Delphinium Larkspur.

Do. Ajacis, rocket, 1ft. to 2ft., June to September, varieties numerous, as dwarf, rocket, rose, tall rocket, tall rose, &c.

Do. consolida, branching, 2ft. to 3ft., June to November, varieties numerous, as fine rose, blue, pale blue, striped rose and blue, unique rose, unique, neapolitan, &c.

Eutoca multiflora, pink, 1ft. 6in., May, July, rich loam.

Do. Franklioni, pink, 1ft., 6in., May, July, do.

E'chium violaceum, violet, 2ft. to 3ft., July, October, rich loam. This is not an annual but flowers freely the first season.

Heliánthus (sunflower) *annuus*, 2ft. to 6ft., June to October, rich loam, sorts various, as tall yellow, dwarf, extra double, &c.

Do. ovatus, yellow, 4ft., June, October, rich loam.

Heliánthus lenticularis, yellow, 6ft., August, September, rich loam.

Do. petiolaris, yellow, 3ft., August, November, do.

Iberis odorata, white, 6in., June, August, do.

Do. spatulata, purple, 6in., June, August, do.

Do. umbellata, purple, 1ft., June, August, do.

Lathyrus, sweet peas, &c.

Do. odoratus, 3ft. to 7ft., July, October, rich loam, colours and varieties numerous, as purple, scarlet, striped scarlet, white, yellow, black, painted

1-
100
100
100
100
100



Pinguicula vulgaris.



Veronica officinalis.



Oxalis crenata.



Adenophora verticillata.

- lady, top knot. Tangier peas, as Lord ANSON's red, Lord ANSON's white, large scarlet, small scarlet, yellow winged, red winged, &c.
- Lobelia erinoides*, pale blue and white, 6in., July September, rich sandy loam. This plant is biennial, but flowers freely the first season.
- Do. bicolor, pale blue, 6in., July, August, rich sandy loam.
- Lupinus luteus*, yellow, 2ft., July, September, rich loam.
- Do. bicolor, pale blue, 6in., July, September, do.
- Lotus arenarius*, yellow, 6in., April, May, do.
- Do. arábicus, pink, 6in., July, September, do.
- Do. *conjugatus*, purple, 6in., July, August, do.
- Lychnis cæli rôsa*, rosy flesh, 1ft., July, September, do.
- Málope trifida*, deep rose, 2ft., June, September, do.
- Macropodium laciniatum*, white, 1ft., June, September, sandy rubbish.
- Mádia elegans*, yellow, 1ft. 6in., July, August, rich loam.
- Nigella hispánica*, blue, 1ft. 6in., June, September, rich sandy loam.
- Oxalis Dillénii*, yellow, 2ft., May, August, sandy peat.
- Papaver* (poppy) *somniferum*, 1ft. to 3ft., June, October, rich loam, colours and varieties numerous, as carnation, picotee, new fringed, double white, double black, scarlet, flesh coloured, brown *Ranunculus*, dwarf Chinese, dwarf French, Flemish, &c.
- Prismatocarpus*, (Venus' looking glass) *speculum*, purple and white varieties, May, August, sandy loam.
- Plectocéphalus Americanus*, lilac, 3ft., August, September, sandy loam.
- Plectocéphalus Taillantii*, blue, 1ft., July, August, do.
- Saponaria calábrica*, red, 1ft., August, September, do.
- Silene Arméria*, rose, 1ft. 6in., June, September, do.
- Do. do. white, 1ft. 6in., do. do. do.
- Tropæolum*, (*Nasturtium*) new dwarf, do.
- Do. majus, orange and yellow, 2ft., July, October, do.
- Valerianella congesta*, rose, 1ft., July, August, do.

REFERENCES TO PLATES.

(For the *Schizanthus*,—see No. 1. Page 14.)

[We have reason to think that we were not clearly understood last Month as to the number of Plates intended to be given in this work,—on that account we have been induced to give what we consider an extra Plate this Month. In future, every number will have one leaf of Plates, containing from one to four Plants, coloured, which, considering the price of our Publication, will, we have no doubt, be satisfactory to our numerous friends. Occasionally an extra one will be given.]

Pinguicula vulgaris, common Butterwort, Diandria, Monogynia, Spur cylindrical. Plant smooth, covered with small transparent grains; leaves radical, egg-shaped, fleshy, with the edges involute, pale green; flowers drooping, purple, scape slightly hairy towards the top. Perennial; flowers in June, July; grows in marshy places, especially wet heaths, common in the North of England and in Scotland. *Pinguicula*, from *Pinguis*, fat, greasiness of the leaves.

Veronica officinalis, common Speedwell, Diandria, Monogynia, Schrophularina. Clusters spiked, lateral stems procumbent, flower stalks shorter than the bractæas, capsule inversely heart-shaped. Perennial; plentiful on dry sandy banks, in open pastures, heaths, and in dry woods; flowers in May and June. *Veronica*, name of a Princess.

Oxalis crenata, Crenate petalled Wood Sorrel, Decandria Pentagynia, nat. ord. Oxalidæ. This plant is a native of Lima, and was brought to this country in 1830, by Mr. DOUGLAS. The plant is very productive of tubers, exactly resembling potatoes. The flowering stem dies annually; when the tubers are found entirely separate, they are about two inches long, and an inch in diameter; when raw, they are slightly sub-acid, but on being boiled

they lose it entirely, and taste similar to the potatoe. In 1832, a plant was planted in the garden of Mrs. HURST, Great Roper's Hall, near Brentwood, in Essex, and has succeeded very well. It was first put into a small pot at the end of April, and at the end of May turned out, with an entire ball of earth, into the flower garden. The root planted was about half an ounce in weight, and it produced ninety, in a space of ground not more than 9 inches square; the weight produced was upwards of four pounds; the roots when boiled, it is stated, were of a more agreeable flavour than the potatoe. The plant is cultivated abundantly in the gardens about Lima as a salad, for which purpose its succulent stems and acid flavour strongly recommend it. The plant grows freely in the open border, is readily increased by cuttings as well as by the tubers, which should be treated in all respects as potatoes. *Oxalis* from *Oxys*, acid, the taste of the leaves.

Adenophora verticillata, whorl leaved *Adenophora*, Pentandria Monogynia. Campanulaceæ. A singular and rare plant, native of the meadows on the banks of the river Dovolgin, in Eastern Tartary. It has been recently introduced by Mr. ANDERSON, of the Chelsea Botanic Garden; flowers from July to September. It succeeds well in the open border, in sandy peat and loam; is readily increased by seeds, or parting the root. *Adenophora* from Aden, a gland, phoreo to bear.

QUERIES, ANSWERS, REMARKS, &c.

QUERY.—I hail with unfeigned pleasure the announcement, which has just been put into my hands, of your *Floricultural Cabinet*, which is in *promise* every thing I could wish, and which is very much wanted. But without offence, let me hope that *all* the promises of the prospectus will be *kept*. It is the breaking faith with the subscriber, after the publication of a few numbers, which is the cause of the failure of periodical works.—I hope that *Suburban Gardens* will have their share of your attention. Many, like myself, who are confined within the smoky atmosphere of London all day, enjoy, beyond measure, our little strips of garden at the outskirts of the town, morning and evening; but we have much to contend with besides smoke and pent up air. We want a knowledge of those plants which will *stand smoke*, and the best modes of cultivating them. And here I cannot but lament that the catalogues of London Seedsmen are not made upon a better plan. At present they are entirely destitute of information as to height, colour, and time of flowering; and whether or not certain seeds and plants are fit for the immediate neighbourhood of the Metropolis—all very essential points; consequently, on purchasing new seeds or plants, their proper situation on the parterre is a matter of doubt and uncertainty, and the situation is often glaringly absurd. The information, frequently reluctantly given by the shopman, is generally incorrect, and sometimes even at the best shops mistakes occur as to seeds, &c. I could mention several within my own knowledge. I hope you will endeavour to *reform* these matters.—As a proof of my good will towards your intended periodical, I shall influence all my gardening friends as far as possible in your favour, and I have little doubt that they will support the work if it continues as well as it promises to commence. Keep out of your pages extraneous matters and it will do.

There are two or three things on which I should be glad of information.—Is human *urine* a beneficial manure? and if so, how should it be applied—in a liquid state, or mixed with dung?—The same as to *soap suds*.

Have any experiments been made on *milk*? and if so, what is the result?—I am now trying it on two or three auriculas; I shall let you know my success.*

I want a plan for a moveable awning for a small tulip bed, which may be removed to a ranunculus bed, pink bed, &c. My beds lie in succession, my garden being a long narrow slip. I should be much obliged if you, or your correspondents, could give me such a plan. I have thought that something of the kind might be made to go on wooden wheels.

Chelsea, Feb. 12, 1833.

SNOWDROP.

* We shall be glad to receive the result from our respected correspondent.

QUERY.—I am desirous of amusing myself with that greatest solace next to religion, the culture of Flowering Plants, suitable for a flower garden. I wish to cultivate principally what are termed Florist's flowers, such as Polyanthuses, Carnations, Ranunculuses, Pinks, Hyacinths, Tulips, and Dahlias. I should be greatly obliged to any of the readers of the *Floricultural Cabinet*, who are acquainted with the flowers specified, to give me a list of about two dozen of the best sorts of each, with a short description of the colours, &c. of each, and where I might be likely to purchase the sorts. T. J. RISBY.

QUERY.—In the summer of 1831, I visited an Horticultural exhibition near London, at which I found a most striking Dahlia, called "Levick's Incomparable." The sort very probably is now become pretty general. The flowers I saw were particularly striking; the ground colour being a crimson red, and about one inch of the end of each petal was pure white. I was very solicitous to obtain the sort. I did so in the spring of 1832, and was assured the kind I received was correct. I planted it in rather a poor soil according to instructions given me, but I had not one tipped flower during the season,—all were self-coloured. I wish to have the plant with its tipped flowers. If any of the readers of the *Florists' Magazine* can give me instructions to obtain what I desire, I shall be greatly obliged. DAHLIA.

MEETINGS OF HORTICULTURAL, BOTANICAL, AND FLORIST SOCIETIES, &c.

NEWCASTLE HORTICULTURAL SOCIETY.

The first general Meeting of this Society, for the present year, was held in the Music Hall, Newcastle, a few days since. Prizes for flowers were awarded as follows:—The best exotic plant in flower, *Camellia corallina*, to J. G. CLARKE, Esq. The best Bouquet, to Mr. IRELAND, Gardener to W. DONKIN, Esq.

The following plants were exhibited amongst many others; double red *Camellia*; red *Warratah Camellia*; myrtle leaved *Camellia*; *Cineraria cruenta*, and *Amaryllis Johnsoniana*, from the garden of W. LOSH, Esq; *Camellias corallina*; *Dianthiflora* or carnation *Warratah*, and *Sasanqua rosea*; also *Caladium bicolor*, from J. G. CLARKE, Esq; double striped *Camellia*, from Mrs. BEWICKE; *Blattia Tankervilleæ*, from A. DONKIN, Esq.; *Euphorbia splendens*, from Messrs. FALLA. The Committee have awarded the silver medal to Mr. KELLY, Gardener to A. DONKIN, Esq., for an Essay on the Cultivation of *Triverania coccineum*.

CALEDONIAN SOCIETY.

A general meeting of the Society was held on March 7th in a large apartment of the Waterloo Hotel, Edinburgh. Sir T. D. LAUDER, Bart., in the Chair. Prizes were awarded as follows.—Best six Hyacinths of the newest varieties, Mr. KELLY, propagator to Messrs. DICKSON and SONS. Finest seedling *Camellia*, raised in Scotland, with an account of its history and origin, to Mr. CUNNINGHAM, Comely Bank Nursery.

Of the plants sent for exhibition, the following were conspicuous. Two splendid plants of *Azalea ledifolia*, (white Chinese *Azalea*,) *Cinnamodum verum*, in full fruit, *Galanthus plicatus*, a pretty snowdrop; *A'jax exigua*, *A'jax nana*, *Acacia affinis*, flowered in the open air at Cannonmills; *E'pocris impressa* from Professor DUNBAR; *Rhododendron arboreum hybridum*; *E'rica Linnæoides*; *Platylodium parviflorum*; *Xeranthemum proliferum* and *Ardisia crenulata*.

MONTHLY FLORICULTURAL CALENDAR, FOR APRIL.

ANNUALS, HARDY,—(See page 43.)

ANNUALS, TENDER,—(See page 42.)

AURICULAS,—Will now be in flower, they will require protection from rains, and mid-day sun. The plants will require a free supply of water; to water occasionally with manure water greatly improves the flowers; care should be

taken not to apply it over the foliage. When the trusses of flowers are formed, if there are more flowers upon each than can conveniently expand, the small and centre ones should be cut out, so as to leave about six.

CAMPA'NULA PYRAMIDA'LIS.—Offsets or cuttings should now be taken from old plants, and be planted in some fine rich soil and peat, and covered with a hand glass, or they may be struck in heat; after they have struck root, they should be planted in rows nine inches apart, in a shady place in the common soil of the garden. If they be not planted in a shady place they are liable to blossom the first year, which are certain to be weakly and late; but allowing them to remain for one year in the place described, then be taken up and potted in large pots, using a very rich compost, they will be found to flower luxuriantly.

J. BROWN, JUN.

CARNATIONS.—See last month's directions.

CHINA ROSE.—Plants of the tender kinds, as yellow, sweet scented, &c., now placed in heat soon push forth shoots, when they are two or three inches long, cut off close to where they last pushed from, inserted in sandy loam and placed in moist heat, they soon strike root, and will make fine blooming plants for the summer and autumn. Rose trees may still be grafted, the mode of cleft grafting is the most successful, taking care to let the bark of the scion come in contact with the bark of the stock. Cuttings of various plants suited for open borders, as *Calceolarias*, *Salvias*, &c., should now be put in, striking them in moist heat.

DAHLIA SEEDS—should now be sown, if not done before; place them in moist heat. When the plants have made two leaves, transplant them singly into small pots, to be turned out in the open ground at the regular season.

ERYTHRI'NA CRI'STA GA'LLI—cuttings may now be struck, (See page 6.)

ERI'CA (Cape Heath's)—cuttings of some sorts may now be successfully struck, the greater portion strike root freely when the young wood is taken, after it has become sufficiently firm so as to prevent its damping off. The pots for their reception should be filled to within an inch and a half of the top, with broken pot or coarse ashes, the upper part of which should be of a smaller size than those below; over which should be placed a thin layer of Fog, (*Hypnum*) a moss so called, to prevent the sand from working down amongst the draining; the pot should then be filled with fine sifted pit sand, and be pressed down very firm. After being well watered, it is fit for the cuttings. The cuttings should be cut off where the last shoots pushed from. The leaves should be stripped off about half the length of each cutting, and the ends cut clean. In inserting the cuttings, press the sand close to the stems, and finish by watering well. Bell glasses need not be used.

M. NAB, on Heath's.

HERBACEOUS PERENNIALS—should now be divided and re-planted; also biennials, as Sweet William, &c., should be planted for blooming this season.

MIGNIONETTE—to flower in boxes from June should now be sown; the boxes should be about half filled with well rotted dung, the remainder with rich mould. The richness of the compost keep the plants very vigorous and flourishing for a long period.

POLYANTHUS—cuttings now put in will flower at the end of the year.

POLYANTHUS'S.—See last month, page 23.

ROSE TREES.—(see page 23.) It is also a proper time to bud the varieties of China rose, do it as soon as the bark will rise.

TIGRI'DA PAV'ONIA—roots should now be planted in the open borders in a rich soil; the plants will bloom from the end of June to September.

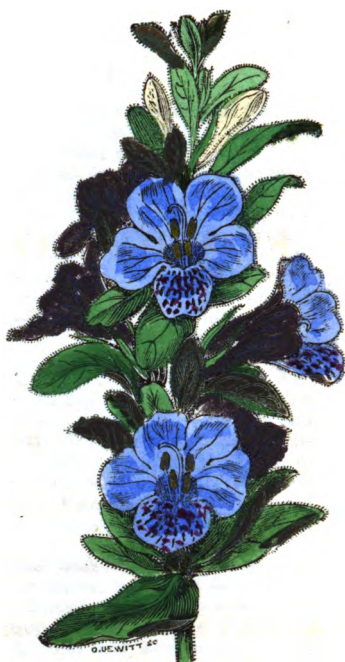
TRIVERA'NIA COCCI'NEA—roots should now be potted in rich soil.

VIOLETS—may now be increased as the stems will be found freely rooting if in contact with the soil. A rich soil upon a dry subsoil suits them best.

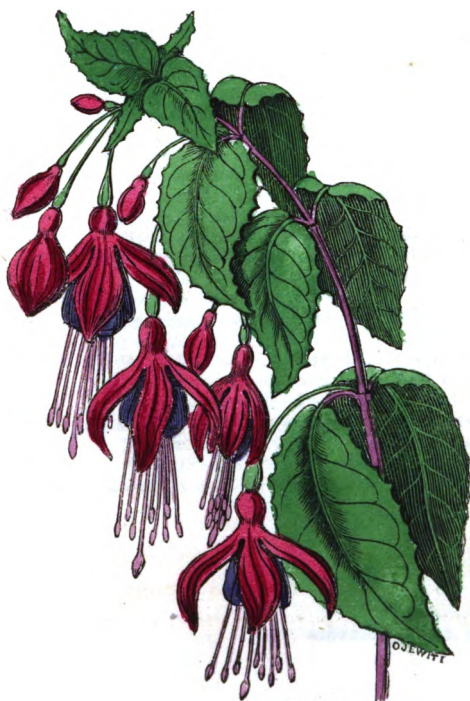




Utricularia intermedia.



Calophanes oblongifolia.



Fuchsia globosa.



Veronica hybrida.

THE
FLORICULTURAL CABINET,

MAY 1ST, 1833.

PART I.
ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Cultivation of the Camellia.* By
an Essex Practical Gardener.

The attention of Floriculturists has of late years been very successfully directed to the increasing of numerous varieties of some of our finest Exotic plants. In none has the result been more satisfactory than in the "most beautiful of the handsome" varieties of Caméllias that have been raised. For many years after the introduction of the Caméllia into this country, no attempt that I can learn of was ever made to obtain improved varieties. The establishment of the London Horticultural Society, however, gave another feature to Gardening in Britain, in all its branches, the benefits of which extended to the class of plants under consideration.

I find that the first Caméllia introduced into this country was the Old Single Red, in the year 1639. The next was brought to England in 1792, by Sir JOHN SLATER, of the East India House; this was that most charming plant, the Double White. The third kind was the old Double Red; it was introduced by Sir ROBERT PRESTON, of Valleyfield, in Perthshire. The varieties imported from China since that period have been many, but some of the most splendid have been raised from seed in this country, particularly by the eminent nurserymen, Messrs. CHANDLER and

BUCKINGHAM, MESSRS. LODDIGES'S, MR. KNIGHT, and MR. COLVILL, also by MR. GRAY, MR. PRESS, and other persons. The varieties recorded are upwards of two hundred. I have paid some attention to raising seedlings, and have been most amply repaid by some very handsome and peculiarly striking varieties, some of which are circulating through the country, and others which will be distributed this year. My practice is to study which admixture of two sorts are likely to produce the most striking distinct colours, and to impregnate accordingly. I apply the farina by mean of a camel hair pencil, and for a fortnight afterwards do not allow any water to fall upon the flowers. I have uniformly found my seedlings to form the habit of growth of the parent sort each individual plant partook most of in colour, whether of the male or female.

I usually force the Caméllias under my charge, so that they bloom from September to April, thus having the opportunity of impregnating early in spring. I generally do so in February or March, by this circumstance I get the seeds well ripened.

When the seed is ripe, I retain it in its capsule till the following February; I then sow it in small pots filled with light sandy loam, and place it in moist heat. When the plants are a few inches high, I pot them singly into small pots, being careful to have them well drained with broken potsherds. After keeping the plants in the moist heat for a fortnight, I remove them into a Vinery, and gradually inure them to the greenhouse temperature. The soil I find them thrive the best in, is turfy loam, two years old; turfy peat, two years old; and rotten vegetable mould from tree leaves, in equal proportion.

The usual method of increasing the various kinds of Caméllias in cultivation is by inarching, plants being raised by cuttings of the single red, and the double sorts inarched upon them. I find, however, that the double sorts may be raised by cuttings as successfully as the single kinds, which method is less troublesome than inarching.

The advocates for inarching state that plants of the double sorts may be raised by cuttings, but that they uniformly wither and die in a year or two. In opposition to this statement I have to observe, that I have many plants of the handsomest double kinds raised from cuttings during several successive years, which are at

this time looking better than any inarched plants I have under my charge, or that I see in other places, and they have grown very near one foot higher each season from the time of potting them off, and are also bushy.

The plan I pursue in raising plants from cuttings is the following:—In March I take off cuttings that are of the previous year's growth, I cut each off straight through the shoot and exactly at its junction with the wood which is a year older. The cuttings I insert in 24 sized pots, and place them close to the sides; the soil I use is a sandypeat. I press the soil very firm around each cutting, particularly close to the stalk; this is necessary in order to prevent air having access to the bottom; for if admitted, it hinders any callosity for roots forming. I place bell glasses, lightly pressed, over the cuttings, and plunge the pots about half deep in a hot bed frame, the heat of the bed being only of a moderate temperature, for if the heat be strong it often kills the cuttings in a short time. I keep them there till I see that the cuttings have pushed and completed their first growth, I then remove them to a Vinery for winter protection. About the end of January or early in February I pot the cuttings off into small pots, being careful to have an inch deep of broken potsherds in each pot, this allows water to pass off freely, which is very essential to their subsequent flourishing. After potting, I place them in heat from 65 to 70 degrees till about the end of May, when I remove them into a greenhouse for the remainder of the season; their treatment in all respects afterwards is the same as with my older plants.

As before stated, it is my usual practice to force Camélias, this is done by taking into heat a few plants at each time, and thus I keep up the blooming season from September to April. In consequence of this mode of treatment, the time for repotting my old plants is at various seasons, I always attend to it as soon as the flowering is over. If I find a plant having its roots matted around the ball, I very carefully shake the ball of earth by striking the bottom against the ground; this causes the ends of the fibres to loosen, and when repotted they are enabled speedily to strike into the fresh soil. After potting, I place the plants in heat from 65 to 70 degrees; here I retain them till the flower buds are formed. The house in which I place them being a Vinery, I frequently

syringe all the plants in it with warm water, this I find benefits the Caméllias very much. When the flower buds are about the size of a large marrow pea, I take the plants into a greenhouse. If it be the summer season, I keep them there for two weeks and then place them in a shaded warm situation in the open air. Any other period of the year I keep them in the greenhouse till the usual period of removing greenhouse plants to the open air; or for forcing if required.

After the flower buds are formed, great care is always taken that the plants do not want water, for if droughted but an hour, the buds are certain to drop. On the other hand, if the soil becomes soddened by too free an application of water, the same misfortune will be the result. I occasionally apply manure water, which I find invigorates the plants very much.

Two years since, I planted out in the open air, two strong plants of Caméllia, which flourish so far, and bloom profusely during May and June. Although the two last winters have been unusually mild, yet I am persuaded that in severer winters with slight protection, this beautiful genus of plants, would be found to succeed equal to many of our out door plants.

For your next number I purpose sending you a list and description of those sorts of Caméllias I grow, and which are the handsomest of the varieties I can meet with in the neighbourhood of London.

AN ESSEX PRACTICAL GARDENER.

Feb. 20th, 1833

NOTE.—The probability of Caméllias succeeding in the open air, as stated by our Correspondent, we can confirm by our own experience.

In the year 1819, three plants of Double Caméllias were turned out in the open border in the grounds at Wortley Hall, the sorts were Double Red, Double White, and Double Striped. At the time of turning out, the plants were bushy, and about two feet high. Two of the plants are now from four to five feet high, and one of them spreads about ten feet across. The striped plant produced last spring upwards of one thousand flowers. For the first four years after turning out, each winter the plants had wooden cases, three feet high, placed round them; upon the top of each case a hand glass was fixed, which was removed at pleasure for air or protection. At the bottom of the case inside, six inches deep of rotten leaf mould, or tanners bark was laid over the roots. From the fifth to the eighth year, no wooden case was used, but in the severest weather a mat was loosely thrown over each plant. Since that time no protection whatever has been applied, excepting laying two or three inches of bark or leaf soil over the roots.

In the same situation where the Caméllias are, large Portugal and common Laurels were planted at the same time, they have grown well each year, till the severe winters of 1829 and 1830, such being the exposed cold situation in which the Caméllias and Laurels are planted, that the latter were nearly

ARTICLE II.—*On the Application of Liquid Manure to the Carnation, Polyanthus, Ranunculus, &c. &c.*—
By Mr. JOHN REVELL, Florist, Pitsmoor, Sheffield.

Herewith I send you for insertion in the Floricultural Cabinet, the result of some experiments I have made in the application of Liquid Manure to the Carnation, Polyanthus, Ranunculus, Hyacinth, and Pink; the results have been very pleasing and satisfactory to me, and I hope, if my practice be communicated for general information, it may be of use to cultivators of what is termed florist flowers.

Among the beautiful varieties of Carnations in cultivation, there are a number of sorts of a very pale colour—some even very near colourless. To such, the application of Liquid Manure is found very beneficial, it heightens their colour very materially, and many of the sorts are so much affected by it, that they even become selfs, (i.e. of one colour.)

The manner in which I make use of the Liquid in watering Carnations, such as Butcher's Enchanter, pink bizarre, Wood's Commander, purple flake, Madame Vestris, pink flake, Countess of Sandwich, purple picotee, and other similar sorts coming pale in colour, is to apply it three times a week if the season be dry, and twice if it be wet. I am careful not to pour any of the liquid upon the foliage, but regularly over the surface of the soil, and to give as much at each time of watering as I judge will moisten all the soil. With this treatment the flowers become rich in colour and of a perfect character.

When the kinds above enumerated, are cultivated in the general manner, according to instructions inserted in the Horticultural Register last year, they usually come with scarce any colour at all. Since the time of my drawing up the article referred to, my experience with the liquid manure has transpired. It is my practice with the plants I thus water, to have them placed in a separate lot, so that I avoid mistakes in the application of the liquid manure.

destroyed, whilst the former withstood the intensity of the frosts and cutting winds without the slightest injury.

When properly planted out and gradually inured to the climate, we are fully convinced that Camellias will be found much more hardy than Laurels.

COND.

The liquid should never be applied to those kinds of Carnations that are of a high colour, such as Rowbottom's Victory, Ely's Mayor of Ripon, Hardman's Complete, Warwick's Hero, scarlet bizzarres. Cartwright's Rainbow, Lee's Duke of Kent, pink bizzarres. Taylor's Festival, Potter's Champion, scarlet flakes. Heath's Navarino, Leighton's Bellerophon, purple flakes. Tyso's Princess Victoria, Fletcher's Duchess of Devonshire, pink flakes, &c. These and similar kinds should not be grown too rich, the compost should be composed of more fresh loam than is usually given in growing for competition, or they will be apt to run into one colour.

It is usual in the culture of the Polyanthus, to give it a considerable portion of well rotted manure, in order to obtain a rich dark ground colour, but I find that by applying the liquid this is effected much more satisfactorily, the ground being of the richest possible hue. This is essential in obtaining a perfect Polyanthus, the ground colour being the first property of that flower.

The liquid is highly beneficial for self-coloured Ranunculuses, it is far preferable to top dressing the bed with night soil, as is generally done. I prepare the liquid for this class of plants by providing a quantity of sheep dung in a tub, and pouring water upon it, allowing the liquid to be very strong, this I pour upon the bed between the rows of plants. The beneficial effects imparted, are soon visible by the improved verdure of the plants, and the flowers are much increased in size, and the petals firmer and stronger. The richness and variety of colour, in the blossoms of this beautiful genus of flowering plants, have often brought to my mind those beautiful lines of Thompson, where he says,

—————"Who can paint
 "Like Nature: Can imagination boast,
 "Amid its gay creation, hues like hers:
 "Or can it mix them with that matchless,
 "And lose them in each other, as appears
 "In every bud that blows."

The class of Ranunculuses to which I apply the liquid, are such as Naxara, Condorset, Æil Noir, Kermes Argentina, Variat, Violet Fonce, &c. I never use it to any striped kind.

When Hyacinths have thrown up their flower stems, I pour the liquid between the rows of plants, it makes the flowers much finer in colour and size.

Pinks are also benefitted by giving them the liquid, taking care not to pour it over the foliage.

JOHN REVELL.

Feb. 26th, 1833

ARTICLE III.—*On the Culture, &c. of the Cockscumb, (Celosia cristata.)* By Mr. JOHN OXLEY, Gardener to the The Right Hon. Lord Southampton, Whittlebury Lodge, Towcester, Northamptonshire.

Herewith I send you the dimensions of a Cockscumb, (*Celosia cristata*,) and the method of treatment I pursued with the plant.

It was exhibited on the 27th of July, 1832, at the Northampton Horticultural Show, and on the 31st of July, at Buckingham Horticultural Show, when the comb measured 32 inches over, 14 inches long, and 8 inches wide. By the end of summer it measured 36½ inches over, 14½ inches long, and 8½ wide, the plant was 3 feet 3 inches high, and the comb of a very handsome shape, and of a fine scarlet colour.

The seed was sown about the middle of March, in a mixture of leaf mould and loam soil, and placed in a cucumber frame. When the plant was fit for potting, it was put into a 48 sized pot, in a compost consisting of one part of unfermented horse dung, fresh from the stable, clearing it of any straw; one part decayed leaves, one part rotten horse dung, and the other part rotten turf cut into lumps about an inch square. The compost was well mixed together. As the plant advanced in growth and filled the pot with roots, it was regularly shifted into a pot one size larger, until it was in one thirteen inches in diameter. The pot each shifting was well drained to prevent the plant being soddened with water. The plant was kept in a cucumber frame till it reached the glass, and then removed to a Pine Stove, where it was placed so that the crown of the plant was about one foot from the glass. The temperature was from 70 to 90 degrees of Fahrenheit.

When any lateral branches pushed, they were removed immediately. The plant was uniformly kept moist at its root, by a free supply of manure water, from cow and sheep dung being soaked. The liquid was always applied about the same degree of temperature as the Frame or Pine Stove.

JOHN OXLEY.

Whittlebury Lodge, Feb. 18th, 1833.

ARTICLE IV.—*On the Cultivation of the Streptocarpus Réxii, as a Border plant.* By Mr. G. HARRISON, Nurseryman and Florist, Downham Market, Norfolk.

The *Streptocarpus Réxii* has a beautiful appearance when grown in the open border during the summer months, I do not know a plant more worthy of introduction into the flower garden; it is easy of culture, and blooms profusely. Not having seen this plant cultivated extensively, I am induced to offer these few remarks to the readers of your Magazine, in hopes they may be a stimulus to the introduction of this plant more generally into the open border. The seed may be sown in April, either in pots or flat pans, (the latter I prefer,) in a mixture of loam and peat; let the pans be placed in a hot bed frame until the plants are fit for potting off. The seeds should be sown very thin, otherwise the major part of the plants would perish, for the want of air to their stalks, as they grow with their foliage prostrate. As soon as the plants are strong enough for potting off, let a quantity of pots be filled with peat and rich loam, (the pots I use are 6 inches deep and $4\frac{1}{2}$ wide,) turn out the plants carefully, and place one in each pot, let a little water be given to them with great care, and afterwards remove them into the frame. When they have got a little established in these pots, they may be removed into a cool frame or greenhouse. In June, the pots may be placed in the open air, and the plants regularly attended to during summer with water. Towards the end of October, remove them into a frame, pit, or greenhouse, as they require to be kept from severe frosts. Early in May following, prepare a bed for the plants, (a circular one I recommend for this plant,) and the bed be raised with loam and peat, the highest in the centre, gradually declining to the edge of the bed. A bed fourteen feet in diameter should rise two feet at the centre. In turning out the plants into the bed, place one in the centre, and one every ten or twelve inches over the surface; let a little water then be given to the plants, and as often afterwards as may be necessary. In three or four weeks after turning out the plants they will have nearly covered the surface of the bed, and will be one complete mass of bloom. I had a bed of this plant last sum-

mer, which was entirely covered with blossoms from the end of May to October. As soon as frost is apprehended, take up the plants, and repot them. These plants, when turned out in May following, will bloom much finer than those raised from seed when one year old.

GEORGE HARRISON.

Downham Market, March 13th, 1833.

ARTICLE V.—*On the Cultivation of the Balsam, (Impatiens Balsamina.)* BY SAINT PATRICK.

Observing in page 20 of the *Floricultural Cabinet and Florist's Magazine*, that *Flora* solicits a little information on the cultivation of the Balsam, and as the time is fast approaching for sowing the seeds, I beg leave to offer you the steps I take in the culture of this plant. I generally sow for the first time about the 1st of April, and once a month afterwards for a succession. I sow in 48 sized pots using light mould—the pots are plunged in a hot bed frame, and a garden pot placed inversely over the one in which the seed is in, which greatly assists the seed in vegetating. As soon as the plants appear, I remove the pot, and admit air sufficient, to prevent them being drawn up weakly. When water is required, I pour it round the side of the pot until it has covered the surface of the mould. When the plants have grown three or four inches high, I pot them off singly into 60 sized pots, and afterwards replunge them into the frame. The compost I use is a strong rich loam, with one third of rotten manure and night soil. This is well mixed together six months before wanted for potting, and frequently turned over during frosty weather. The tops of the plants are kept at all times within one foot of the glass, and air is freely admitted in order to keep the plants strong. I water them twice a week with manure water, made from hogs and deers dung. As soon as the pots are filled with roots, I remove them into 48 sized pots, with their balls entire, and replunge them in the frame. The heat is generally kept at 70 degrees. Should any blossoms appear, I cut them off. The plants soon require potting into 32 sized pots, and all blossoms then shewing are taken away as they put forth. When the plants have got well established in these pots, I remove them into 24's and afterwards allow the blossoms to remain.

The plants by this time are well established for blooming, and are soon full of blossoms; I then remove them from the frame into a greenhouse or stove.

I had plants last year which were five feet high from the pots, remarkably strong and bushy, some of the plants measuring upwards of ten feet in circumference, and were covered with perfect double blossoms.

Taking off the blossoms as they appear, in the early stage of growth, greatly assist the plants in growing, and the flowers finally produced are much larger, and in much greater profusion than otherwise they would have been.

ST. PATRICK.

March 26th, 1833.

PART II.

EXTRACTS.

Plants figured in the following Periodicals for April, 1833 :—
Curtis's Botanical Magazine, 3s. 6d. coloured, 3s. plain. Edited
 by Dr. HOOKER, King's Professor of Botany in the University of Glasgow.

1. *Erythrina velutina*, Velvetty Erythrina, class, Decandria; order, Diadelphia, natural order, Leguminosæ. Of this fine plant the Editor says, I am indebted to the Rev. R. T. Lowe, for the drawing made from the living plant in Madeira, and also for the following description :—

The only individual of this noble species which I have seen in flower, is growing amidst a plantation of other rare exotic trees, in the Garden of the Quinta de Valle, near Funchal, at a height of three or four hundred feet above the sea. Of its particular history and introduction, it is now impossible to learn anything with precision. It was probably imported by a former proprietor of the place, Mr. J. MURDOCH, with many other rare exotics, inmates of our stoves and greenhouses in England, which have now attained, in this favoured spot (Madeira,) the size and luxuriance of forest trees, the present plant is thirty feet high, and its trunk about two feet in girth. Flowers produced in June and July, large and handsome, in partial whorls of from four to eight. Colour, bright orange red. *Erythrina*, from *Eruthros*, red; from the fine red colour of most of the species.

2. *Psychotria daphnoides*, Daphne like, Pentandria, Monogynia, Rubiaceæ. An inhabitant of the margins of woods on the banks of Brisbane River, New Holland, sent from thence to the Kew Garden, in 1829, by A. CUNNINGHAM, Esq. It is a greenhouse plant, flowers small, white, blooms in April. Culture: increased by cuttings, thrives in loam and peat. *Psychotria*, from *psyche*, life, and *trethro*, to support; on account of the powerful medicinal properties of the *Psychotria emetica*.

3. *Brassavola nodosa*. Fragrant Brassavola, Gynandria, Monandria. Orchideæ. This plant was sent by WILLIAM PARKES, Esq. of Kingston, Jamaica, in 1830, to CHARLES HORSFALL, Esq., Mayor of Liverpool, with whom it bloomed in January, 1832. Flower, Sepals, yellowish green; Labellum, whitish. The plant had remained dormant, without showing any signs of vegetation for about six months after its arrival in this country, and then put forth one shoot, which attained its full growth in the course of two months, when it became dormant for the same period as before. Culture. Increased by division; soil, peat and rotten wood. Brassavola, from A. M. BRASSAVOLA, an Italian Botanist.

4. *Corydalis longiflora*, long flowered. Diadelphia, Hexandria. Fumariaceæ. A greenhouse plant, native of the Altaic Mountains, received at the Edinburgh Botanic Garden, in 1832, from Berlin, bloomed in December and January. Flowers, an inch and three quarters long, scattered loosely upon a terminal Raceme. Colour, rose. Culture. Division of tubers; soil, peat and loam. Corydalis, from Korydalis, a lark, from the long spur or claw of the flower, resembling that of a lark.

5. *Gelonium fasciculatum*, cluster flowered. Diæcia, Polyandria. Euphorbiaceæ. Introduced from the East Indies to Kew Gardens, it is a stove plant whose flowers are of little beauty. It is also called in some collections, *Sargoda glabra*. It blooms in August; colour, greenish white.

6. *Hydrastis Canadensis*, Polyandria, Polygynia, Ranunculaceæ. It is a native of Canada, introduced into this country in 1759. It grows six inches high, blooms in April and May. Flowers, green, uninteresting—they are succeeded by a rich scarlet berry as large as a raspberry, appearing in July. Culture. Increased by seeds or division; soil, moist loam. Hydrastis, from Hydor water; plant growing in humid places.

7. *Epidendrum pygmaum*, Dwarf Epidendrum, Gynandria, Monandria. Orchideæ. A stove plant sent from Brazil, to Mrs. ARNOLD HARRISON. Flower, labellum, white, and its intermediate column tipped with red. Sepals, greenish. Epidendrum, from Epi, upon; dendron, a tree, growing upon.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Esq.

Professor of Botany, in the London University. Coloured,

4s., plain, 3s.

1. *Banksia prostrata*, Prostrate Banksia. Tetrandria, Monogynia. Proteeaceæ. Discovered by Mr. BAXTER, in 1832, in New Holland. It is a prostrate greenhouse shrub, not exceeding a foot or two in height. Its branches are deep brown, covered with a close down. The leaves are seated on long hairy stalks, and are a deep bright green, glaucous beneath. The flower heads are small, of a deep cinnamon brown, with bright yellow stigmata, blooms in August. Culture. Increased by cuttings or seeds; soil, sandy peat. Banksia, in honour of Sir JOSEPH BANKS, Bart.

2. *Duvaua dependens*, round leaved Duvaua. Polygamia, Monæcia. Anacardiaceæ. A shrubby plant from Chili. Flowers, very small; yellowish green; it produces numerous dark purple berries. Culture. Same as D, ovata, described in page 36. Duvaua, so called after a French Botanist.

3. *Gompholobium venulosum*, veiny leaved. Decandria, Monogynia. Leguminosæ, the Tea Tribe of flowers. This plant was raised by Mr. KNIGHT, Nurseryman, King's-road, from seeds collected by Mr. BAXTER, in New Holland. It is a delicate greenhouse shrub, with very neat pretty blossoms, flowers in July and August. Colour, bright yellow. Culture. Professor LINDLEY, observes:—All plants from the southern coast of New Holland, or Van Dieman's Land, naturally enjoy a climate which in the winter season, is about as cold as the winters in the south of France; they are found very much in dry exposed situations; and many of the plants, especially Pimeleas, are physically incapable of enduring cold and moisture together, although the former by itself, if not above a certain amount is prejudicial to them.

They therefore, should be kept in winter in a cool airy place, where a perfect command of ventilation is possessed; and the temperature should not be allowed to rise much above 40 or 45 degrees in the winter months. Upon the above plan, Mr. KNIGHT manages the young plants obtained from the collections formed by Mr. BAXTER, and with such success that no doubt can be entertained of its excellence. Increased by cuttings or seeds; soil, sandy peat. Gompholóbium, from Gomphos, wedge; and lobus, pod. Shape of seed, pod.

4. *Clárkia elegans*, Californian Clárkia, Octandria, Monogynia. Onagraræ. The name of Clarkia, like that of Rose, carries a charm with it, for it is impossible not to associate with it, the idea of that sweet North American flower, which is now the ornament of every flower market from London and Paris, to Moscow and Stockholm. The present very beautiful species was found in California, by Mr. DOUGLAS, and was raised in 1832, in the Garden of the Horticultural Society, and blossomed from July to October. Flowers, of a fine rosy purple, not quite as large as *C. pulchella*. The plant grows two feet high. Culture. Increased annually by seeds, or kept perennial by slips taken off early in September, and placed in a greenhouse during winter; soil, rich loam. Clárkia, so called after Captain Clark, who accompanied Captain Lewis, to Rocky Mountains.

5. *Calceolária Herbertiána*; var *parviflora*. Mr. W. Herbert's, Calceolária, small flowered variety. Diandria, Monogynia. Scrophularinæ. The present variety was raised from seeds found by Mr. CUMING, near Valparaiso. The plant flowered in the Garden of the Comte de Vandes, in May, 1832. The flowers are smaller than *C. Herbertiána*, more densely corymbose and numerous, and the tip, which is less inflated, has three distinct projections, which give it a sort of plaited appearance. Colour, yellow, streaked with orange. Culture. The same as *C. chilensis*, *integrifolia*, &c. that is to say an open border in a dry sheltered place in summer, and a greenhouse in winter. Calceolária, from Calceolus, a slipper form of corolla.

6. *Stenáctis speciosa*, shewy Stenáctis; Syngenesia, Polygamia Superflua. Compositæ. A hardy perennial, native of California, sent from thence by Mr. DOUGLAS, to the London Horticultural Society. The flowers are very handsome, and shewy. A bed of it would have a splendid appearance. It grows two feet high, and flowers from July to October. Although a perennial, seedlings flower very freely the first year; and so early as to perfect abundance of seeds, and may be thus treated as an annual. Flowers, from two to three inches across; the colour of the ligulate petals of the Ray, are dark violet, and the Disk is a deep yellow. Culture. Increased by seeds, or division of the plant; soil, rich loam. Stenáctis, apparently from Stena to sigh, the application we do not know.

7. *Pimeléa hispida*, long stalked Pimeléa. Diandria, Monogynia. Thymelea. A beautiful greenhouse shrub, native of New Holland, discovered by Dr. Brown. It is nearly allied to the Pimeléa rosea, to which it is superior in beauty, and from which it is readily known by its broader leaves, larger flower heads, and especially by the long stiffish hairs that clothe the base of the calyx densely, and the apex sparingly, so as to give the flowers the aspect of delicate feathers. These hairs are long, very transparent tubes, with a considerable number of minute particles within their cavity; they are doubtless extremely well adapted to shew distinctly that curious motion in the fluids of plants, which forms so singular a species of circulation in their system, and which seems to be universal in hairs, so long as they are alive. Flowers, rose coloured. Culture. Increased by cuttings, struck in sand; soil, sandy peat.—See No. 3. Pimeléa, from Pimele, fat.

Sweet's British Flower Garden, coloured, 3s., plain, 2s. 3d.

Edited by DAVID DON, Esq., Librarian to the Linnæan Society.

1. *Lilium Catesbæi*, Catesby's Lily. Hexandria, Monogynia. Liliacæ.

This elegant Lily is a native of Virginia and Carolina, growing in low, open, mossy swamps. Introduced into this country in 1787. It is quite hardy, grows 1½ feet high, flowers solitary. Colour, deep orange red, spotted with dark. Blooms July and September, grown at Dennis's Nursery. Culture. Increased by offsets, or seeds. It thrives best in peat soil. Liliaceæ, from Li, whiteness of the flowers of some species.

2. *Helleborus niger*, var *vernalis*, vernal black Hellebore. Polyandria, Polygynia. Ranunculaceæ. This variety of the Christmas Rose, is somewhat prettier than the other two varieties, having the blossoms at least a third larger, and of a clearer colour, being white changing to a pale rose. It blooms six weeks later than the common variety, grown in the Botanic Garden, Chelsea. Culture. Increased by parting; soil, rich loam. Helleborus, from Helein, to cause death, and bora, food; poisonous.

3. *Iris biglomis*, Glumaceous Iris, Triandria, Monogynia. Iridææ. A native of Siberia, introduced in 1811, discovered by the celebrated Pallas. Flowers, pale blue, marked with numerous purple veins and spots, very pretty. Grown in the Botanical Garden, Chelsea. Culture. Increased by division; soil, sandy peat. Iris, from Iris the eye, the variety and brilliancy of its colour.

Narcissus recurvus, drooping leaved, Triandria, Monogynia. Amaryllidææ. This is one of the largest and latest flowering species of the Narcissus, excepting the double flowered varieties. It is a perfectly hardy plant, flowering in April and May. Flowers, corolla white; crown, edge crimson; centre, deep golden. This and another variety, adorn the London Markets abundantly. Culture. Increased abundantly by offsets in any soil or situation, but will not thrive well, and scarcely flower at all, in a poor dry or light soil. But when seasonably transplanted every third year into deep, rich, and rather moist, or strong loamy soil, it will bloom very freely and perfectly. The same attention to culture is applicable to nearly all the Narcissus's. Narcissus, from Narke, stupor; effects of smell.

A. H. HAWORTH, Esq.

Loddiges's Botanical Cabinet, 5s. ten plates coloured, 2s. 6d. partly coloured. Edited by Messrs. Loddiges's.

1. *Barkkia mitis*, Didynamia, Angiospermia. Acanthaceæ. This is a native of India, introduced in 1816. It is an upright stove plant growing three feet high, flowers very freely from May to September. Colour, fine yellow. Culture. Increased freely by cuttings; soil, loam and peat. Barkkia, from J. BARRELIER, of Paris, a celebrated Botanist.

2. *Billbergia zebrina*, Zebra streaked. Hexandria, Monogynia. Bromeliaceæ. This elegant plant is a native of Rio de Janeiro, where it is found growing upon trees. It was introduced into this country in 1820. It grows 1½ feet high, bloomed in January, with Messrs. Loddiges's. Flowers, pendulous; colour, yellowish green. Culture. It is cultivated easily in the stove, potted in vegetable earth with a portion of sand; and but little water in the winter season, increased by suckers. Billbergia, from J. G. BILLBERG, a Swedish Botanist.

3. *Thunbergia frõgrans*. Fragrant Thunbergia, Didynamia, Angiospermia. Acanthaceæ. A native of the East Indies, introduced in 1796, by the late Lady de Clifford. It is a delicate stove climber, and merits a place in every collection of stove plants, being almost perpetually adorned with its snow white fragrant blossoms, it grows several feet high. Culture. It is increased with facility by cuttings; soil, light loam. Thunbergia, from Ch. P. THUNBERG, a celebrated Botanist and Traveller.

4. *Maxillaria punctata*, dotted flowered. Gynandria, Monandria. Orchidææ. This plant is a native of Brazil, and was introduced in 1822. It blooms in November and December, the flowers being of an agreeable fragrance; colour, greenish yellow, dotted with red. Culture. It requires the usual treatment of these charming stove plants; increased by separation. Soil, potted in

vegetable earth with moss and pieces of broken pot intermixed. *Maxillaria*, *Labellum*, resembling the *Maxillo* of some insects.

5. *Justicia speciosa*, showy *Justicia*. Diandria, Monogynia. Acanthaceæ. A native of the East Indies, growing in the interior of Bengal, where it is very ornamental. Introduced into this country in 1826. It was first raised by Sir HENRY BUNBURY, of Barton Hall, Suffolk. Flowers, blooms July to October, growing four feet high; colour, fine rosy purple. It merits a place in every collection of stove plants. Culture. Easily increased by cuttings; soil, rich loam. *Justicia*, from J. Justice, an eminent Scotch Horticulturist and Botanist.

6. *Psilotum triquetrum*; Triangular, Cryptogamia Lycopodiinæ. This is a native of the West Indies, also it is said, of the Mauritius and of New Holland. It was introduced here in 1793. Messrs. LODDIGES's state, that they once had a plant which lived many years, growing out of a trunk of *Cycas revoluta*. Culture. It requires the stove; it may be potted in the same way as the tropical ferns. *Psilotum*, from Psilos, naked; destitute of leaves.

7. *Oncidium Harrisonia*. The description &c., given in our number for April, page 36.

8. *Erica penicillata*, pencilled *Erica*. Oetandria, Monogynia. Ericææ. This very beautiful species is a native of the Cape of Good Hope. Introduced in 1792, by Messrs. LODDIGES's. Flowers—colour, fine rose, which are produced freely. Culture. It is exceedingly difficult to strike by cuttings, consequently requires to be raised from seeds. *Erica*, from Ereiko, to break; fragility of branches.

9. *Luculia gratissima*, most grateful; Pentandria, Monogynia. Rubiaceæ. This most beautiful flowering plant is a native of Nepal and Silhit, originally classed with *Cinchora*. According to Dr. Carey, it is a small branching tree, growing to the height of sixteen feet, found on the smaller hills in exposed situations, where it flowers nearly all the year. He says it is impossible to conceive any thing more beautiful than this tree, when covered with its numerous rounded panicles of pink, very fragrant, large blossoms. Blooms in this country from June to September. Culture. It is difficult of cultivation, the stove being too close for it, and the greenhouse too cold. It may readily be increased by cuttings or layers, and should be potted in loam and peat soil. *Luculia*, from *Luculi Swa*, of Nepal.

10. *Rhipsalis mesembryanthemoides*. Mesembryanthemum like. Icosandria, Monogynia. Cactææ. A curious little plant from South America, introduced in 1817. Flowers, white, appearing in November and December. Culture. Increased by cuttings; soil, peat, loam, and lime rubbish. *Rhipsalis*, from *Rhips*; a willow branch, flexibility of the branches.

The Botanical Garden. By Mr. B. MAUND. Monthly, 1s. 6d., large; 1s. small. Coloured.

1. *Lychnis Flos Jovis*, umbellate Rose Campion; Decandria, Pentagynia. Caryophyllææ, native of Germany. Hardy perennial, introduced in 1726, grows two feet high, flowers in July; colour, rose. It may be raised from seeds; divided; or struck from cuttings of the flower stem before they begin to flower. The term *Lychnis*, from the Greek *Lychnos*, a lamp; down of the leaves as wicks; the name *Flos Jovis*, flower of Jove.

2. *Scutellaria alpina*, alpine sculcap; Didynamia, Gymnospermia. Labiataæ. Native of Hungary. Hardy perennial, introduced in 1752, grows nine inches high, flowers from June, to September; colour, light blue and white. It may be raised from seeds, it may also be divided at the roots, which in some situations multiply rapidly. *Scutellaria*, from the latin *scutella*, a small dish; figure of calyx.

3. *Anagallis Monelli*, Monellis pimpernel; Pentandria, Monogynia. Primulacææ, native of Italy. Perennial, introduced in 1648, grows nine inches high, flowers from June, to September; colour, rich azure blue, which are produced

abundantly. It strikes readily from cuttings, but it must have winter protection. Anagallis is derived from the Greek anagaleo, to laugh, from its exhilarating properties. Monelli, the name of an Italian botanist.

4. *Celsia cretica*, cretan celsia; Didynamia, Angiospermia. Solanum, native of Crete. Hardy biennial, introduced in 1752, grows five feet high, flowers from July to September; colour, yellow, raised from seeds. The present generic name *Celsia*, was adopted by LINNÆUS, in honour of his friend OLAUS CELSIUS, at Upsal. Cretica, from Crete, an island of the Mediterranean, now called Candia.

PART III.

MISCELLANEOUS INTELLIGENCE.

PRIZE FLOWERS EXHIBITED IN 1832.

At the various Horticultural and Floricultural Meetings held throughout the country, it is usual to award several prizes to each class of colour in the flowers exhibited, as eight prizes for grey-edged Auriculas, eight prizes for green-edged, &c. We have, therefore, selected out of all the accounts of Meetings we could obtain, six of each class obtaining the greatest number of first prizes. Our object in doing so is to give our readers who may be unacquainted with many of the sorts of flowers, a knowledge of their merits as determined by the selected Judges at the various exhibitions, and thus be a guide, in some degree, to a choice of valuable kinds of flowers in any addition about to be made.

AURICULAS.

	GREY-EDGED.			
	First Prizes.	Total Prizes.	First Prizes.	Total Prizes.
Grimes's Privateer.....	20	36	Cox's Bishop of Lichfield	3 6
Kenyon's Ringleader....	14	31	Scholes's Ned Lud.....	2 19
Taylor's Ploughboy	3	14	POLYANTHUSES.	
Thompson's Revenge....	2	13	Pearson's Alexander	27 39
Rider's Waterloo	2	9	Buck's Geo. IV.	5 13
Fletcher's Ne plus ultra..	4	4	Cox's Prince Regent	4 17
GREEN-EDGED.			Beauty of Coven.....	3 5
Booth's Freedom	9	17	Eckersley's Jolly Dragoon	3 6
Lee's Col. Taylor	7	12	Waterhouse's Geo. IV. ..	3 3
Polli's Highland Laddie	4	13	PINKS.	
Stretches' Alexander	4	13	PURPLE LACED.	
Moore's Jubilee	3	5	Lustre	18 36
Warria's Blucher	3	5	Suarrow	16 30
WHITE-EDGED.			Sir John	8 16
Hughe's Pillar of Beauty	9	25	Independent	4 14
Lee's Bright Venus	8	24	Wigley's Beauty.....	4 10
Taylor's Glory	5	20	Apollo	4 4
Popplewell's Conqueror..	3	13	RED LACED.	
Wood's Delight	3	9	Geo. IV.	10 25
Pott's Regulator	3	9	Humphrey Cheetham ..	9 21
SELFS.			Lady Green	4 8
Grimes's Flora's Flag....	11	30	Claudius	4 15
Redman's Metropolitan..	7	31	Jupiter	4 14
Berry's Lord Leigh.....	5	19	Rosea	3 13
Netherwood's Othello ..	5	13	BLACK AND WHITE.	
			Cicero.....	13 25

	<i>First Prizes.</i>	<i>Total Prizes.</i>
Parry's Union.....	10	13
Davey's Eclipse	4	13
Heroine	4	4
Barratt's Conqueror	3	3
Duchess of Rutland	3	9

CARNATIONS.

SCARLET BIZARRES.

Walmsley's Wm. IV.....	12	18
Wild's Perfection	11	44
Waterhouse's Rising Sun	6	21
Tate's Friday Night	4	8
Archer's Sir Isaac Newton	4	8
Ely's Mayor of Ripon ..	3	16

PINK BIZARRES.

Wakefield's Paul Pry....	35	54
Gregory's King Alfred ..	11	36
Cartwright's Rainbow ..	10	38
Do. Travelling Queen ..	4	8
Lee's Duke of Kent	4	28
Jarratt's Lucetta	2	2

SCARLET FLAKES.

Pearson's Madame Mara	40	63
Taylor's Festival	10	21
Potter's Champion	4	11
Orson's Rob Roy	3	7
Sarjant's Washington ..	3	7
Plummer's Waterloo	2	7

PURPLE FLAKES.

Turner's Prin. Charlotte	30	56
Leighton's Bellerophon..	10	32
Hall's Major Cartwright..	5	27
Nott's Alfred the Great..	4	11
Wild's Marianne	4	7
Wood's Commander	3	15

PINK FLAKES.

Fletcher's Duchess of Devonshire	17	35
Plant's Lady Hood	14	43
Clegg's Smiling Beauty..	6	21
Sir George Crewe, or Miss Foote	3	20
Tyso's Princess Victoria..	4	4
Woodhead's Mary O'Neil	3	5

RED PICOTEES.

Martin's Prince George..	12	16
Hufton's Will Stukely ..	12	37
Hird's Alpha	7	14
Taylor's Lady Nelson ..	6	12
Pearson's Chilwell Beauty	4	15
Blaize's Bright Star Ring-leader	4	13

PURPLE PICOTEES.

Lee's Cleopatra	19	45
Boothman's Prin. Victoria.	11	21
Hackin's Albion	5	8
Butcher's Fair Ellen	5	11
Lee's Lady Wildman	5	7
Martin's Queen Adelaide	4	5

DAHLIAS.

The following list of Dahlias are what have obtained prizes at the various exhibitions as far as we can obtain information. We have only selected six of each class, where many more sorts of each class were exhibited. There have been some very superior sorts exhibited at some of the meetings, but not brought into competition.

WHITE. *First Total
Prizes. Prizes*

King of the Whites	6	14
Paper White	3	6
Mount of Snow	1	7
Priscilentissima	1	6
Alba multiflora	1	3
Queen of the Whites....	1	2

SPOTTED OR MOTTLED.

Nymphæflora.....	2	4
China aster.....	2	3
Levick's Incomparable ..	2	6
Tincta.....	1	3
Guttatus.....	1	3
Picta	1	4

BLUSH.

Albinia	3	7
New Blanda	1	3
Miss Turner	0	3

LILAC.

Royal Lilac.....	3	18
Blush Lilac.....	2	13
Superb Lilac	2	3
Lady Lacon	1	5
Lady Brougham.....	1	4
Gloriosa.....	1	2

ROSE OR PINK.

Lady Grenville	3	5
Rosea alba.....	3	5
Galanthus	3	4
Queen of the Roses.....	2	6
Surpasse triumph royal..	2	5
Reform	2	4

YELLOW.

Squibb's pure yellow	6	13
Queen of the yellows	3	7
Golden yellow.....	2	3
Wells dwarf yellow	0	3

ORANGE.

Aurantia superba	3	8
Eximia	3	6
Widnall's Prince of Orange	2	3
Aurantia pallida.....	1	3
Lord Milton	1	4
Ward's Prince of Orange	1	2

SCARLET.

Countess of Liverpool ...	6	18
Dan O'Connell	2	3
Romulus.....	1	5
Coccinea speciosissima ..	1	2

	<i>First</i>	<i>Total</i>		<i>First</i>	<i>Total</i>
	<i>Prizes.</i>	<i>Prizes.</i>		<i>Prizes.</i>	<i>Prizes.</i>
Barrett's William Fourth	1	2	Barrett's Susannah	1	3
Scarlet turban	1	7	Flora perfecta	1	2
CRIMSON.			Commoda	1	8
Cicero	3	5	Purpurea elata	1	1
Lady Fitzharris	3	4	DARK.		
Nutter's Apolla	2	8	Mogul	2	8
Dr. Franklin	2	2	Stephenia	2	7
Fulgida perfecta	2	3	Beaute surpassante	2	3
Redant crimson	0	4	Black Turban	1	15
SHADED OR STRIPED OF VARIOUS			Vesuvius	1	5
COLOURS.			Dawson's Victory	1	3
Commander-in-Chief	4	4	ANEMONE.		
Douglas's Augusta	2	6	Painted Lady	5	12
Brewer's Fairy Queen	2	3	China aster	4	6
Lord Farnbro'	1	16	New scarlet	3	3
Zebrina	1	3	GLOBE.		
Conqueror	1	1	Crimson	8	8
PURPLE.			Orange	2	6
Triumphant	3	7	Dark red	2	4
Cambridge Surprise	2	16			

TO FLOWER MIGNIONETTE,

DURING THE MONTHS OF WINTER AND SPRING.

Sow the seeds in 48 sized pots, with their bottoms well drained, in a compost of leaf mould, mellow loam, and river sand. Plunge in a frame, having them near the glass, and when the plants are about one inch high, thin them out to six or seven in a pot. Give air when not frosty, but keep the lights closed in severe weather. At all times, except when the plants are in bloom, water them with caution. To flower in November and December, sow August the 12th. To flower in January and February, sow August the 26th. To flower in March and April, sow September the 6th.

DAHLIA NAME.

The derivation and pronunciation of that most noble and beautiful flower, the Dählia, is not generally known; I therefore beg the insertion of the following in the Cabinet:—

Professor DAHL, a Swedish botanist, first presented a plant (in this country) to Lord Holland, from which it derived its name after its introducer. The obvious and correct pronunciation of the Genus Dählia must therefore be dal-ya.

FLORA.

April 3rd, 1833.

ON DESTROYING WOODLICE IN FRAMES, &c.

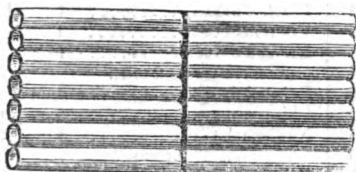
Take 1 drachm of powdered arsenic, and 1 lb. of dried cheese, grate the cheese, and mix it and the arsenic well together; let the mixture be kept perfectly dry. Then take small pieces of wood, and bore in each a hole one inch in diameter, and an inch deep; put a small portion of the mixture into each hole, and beat it down very firm to the bottom of the hole. This done, lay down the pieces of wood, the holes undermost, wherever the insects are troublesome; or place the bits of wood against a wall, with the holes next to it. The

K

insects will be found to harbour in the holes, and the speedy destruction of the intruders will be effected, however numerous. T. B.

N.B. The mixture requires to be renewed in the holes every other day at least; and in making up the mixture, more should not be done at one time than will be required for two or three days, as the poisonous properties of the arsenic when mixed is by that time lost.

TO DESTROY EARWIGS.



Earwigs are very destructive to some kinds of flowers, particularly to Carnations and Dahlias, by biting off a portion of the petals.—It has been an old and general custom to lay hollow bean stalks as a lure for the insects, into which they resort during the day. Bean stalks answer the purpose, but do

not last long, nor are they so convenient for use as traps of a more durable material. I have made use of traps made of tin, each of which compose a number of small tubes, soldered together in the manner as represented in the annexed figure. I dip the trap in sugared water, or sugared small beer, and lay it near the plants; this attracts the insects to feed, and invites them to remain in the tubes, from which they are shaken into a pan of hot water. A little attention to the above practice soon clears the neighbourhood of the flowers, of the insects.

DIANTHUS.

Malden, April 6, 1839.

QUERIES, ANSWERS, REMARKS, &c.

QUERY.—ON THE PROPAGATION OF DAHLIAS BY CUTTINGS, &c.—I have read over with considerable interest the two papers on Dahlia culture, which have appeared in the *Florist's Magazine*, and I beg to acknowledge my obligations to the Authors of the Communications, for the very plain and judicious instructions contained therein; to me, they will prove of real utility.

The knowledge I had previously acquired of cultivating the Dahlia, was in many respects much inferior to many other cultivators, yet I fancy I have discovered a particular in its treatment, which, if others have been previously in possession of, I have never seen any intimation of in any publication which has come under my notice, and to me, it appears the subject of discovery merits a public record, for reasons which I am sure the readers of the Magazine will at once comprehend. As, however, the NOTTINGHAMSHIRE FLORIST and VERTUMNUS, have not touched upon the subject, and they have so liberally contributed to my information I hope my observations will at least be of some service to them.

I have been in the habit of purchasing each season a few of the newer kinds of Dahlias, accordingly I assigned them the best situation and treatment, and the roots were taken up at the end of the season before frost came, with the greatest care and properly stored during the winter. At the following spring, I planted my fine roots entire, anticipating a considerable increase of plants by the cuttings I purposed setting off; but to my very great surprise and disappointment, I could not from many of the roots obtain a single shoot. From the hot bed frame I removed the roots into a stove, but even then equally unsuccessful. I finally planted them in the open border, but not a shoot would push, although the roots still remained quite sound. I resolved to give them a second years trial, and treated them in all respects in the most likely way to accomplish my desires, but no success attended my efforts. The circumstance puzzled me for some time. However, at last, I judged the mystery was developed to me, and my subsequent practice I think, justifies my conclusions.

It is advised by VERTUMNUS, page 33, that in preparing cuttings of new and scarce sorts, that each shoot should be cut into pieces, and of course allowing two joints to each cutting. In this process the cut is made cross-wise of the shoot, close under each jointed rim, and the two lower leaves of each cutting are dressed off. From the joint inserted into the soil the roots are produced; connected with the joint, and at the bases of the leaf stalks, are two eyes, if these be cut out, the cutting will root equally as well as if retained, and the plant will afterwards bloom as vigorously and profusely as if the eyes were remaining, the root will also be sound, and perhaps very fine (as was the case with my roots,) but when planted the following year not a single shoot will push, in consequence of the eyes being cut out as above named. It is, therefore, of importance in putting off cuttings to retain the two eyes uninjured if the perpetuation of the plant be desired.

I prefer the mode of striking advised by the NOTTINGHAMSHIRE FLORIST, page 4, to take off the shoots close to the old root, because several eyes are always situated around the bottom of each shoot, and when roots from such cuttings are planted a second season, a number of shoots are produced from each.

Should any of the readers of the *Florist's Magazine* be in possession of a method of causing roots same as mine to push, or by what other means (differing from what has come under my notice,) the roots are caused to become shootless, I shall be obliged by their communication through the same medium I solicit them.

April 6th, 1833.

DAFFODIL.

ANSWER.—In perusing the first Number of your *Floricultural Cabinet*, I observed a Query (page 20) from an Enquirer, who expressed a desire of knowing how to propagate the *Verbena Melindris*; I must beg to observe that all your Querists, except R. TATE, are signed in fictitious names, and thus we are ignorant to who it is we are imparting our knowledge. Sir, I do wish your correspondents would follow the sensible plan of signing their names; a man need not be ashamed either to receive information or impart it; there is, therefore, no occasion for anonymous communications in matters of art and science. My method of propagating the *Verbena Melindris* is as follows:—when the plants are in full vigour, I place small pots round them in the direction of the runners, and peg a joint to the centre of the pot; they root freely. I cut off the top of the shoots; they bloom and add to the beauty of the Flower Garden until the appearance of frost; I then part them from the parent plant; the pots are full of roots and well established. I place them in the Greenhouse, or a room where no fire is kept, or in a pit. The plants continue nearly inactive, until excited by artificial heat, or the natural warmth of the season. I water sparingly. I assure your correspondent I should not have taken the trouble to inform him how I propagate that beautiful little plant, had it not been for the sake of advancing knowledge; while at the same time I consider an anonymous correspondent scarcely worth regarding, indeed there is a pleasure in giving the fruits of one's experience to persons who are as your correspondent professes, "*Enquirer*;" but I do meet with such a multitude of would-be gardeners, whose ignorance and conceit are so insupportable, that I have said again and again I would have nothing to do with such persons; I trust your correspondent is not of this class. I still further express the distaste I have towards those ignorant and presuming persons who have often so much to do with Gentlemen's Gardens; I will instance this fact. I am here engaged for the period of twelve months, to renovate a long neglected Garden; a labourer having had the management of the Garden for many years, still continues so to do. A brick-flued pit was built there last Autumn. A few days ago some feeble Melon plants were put into it. A crop of Melons may be grown, and if so, wonders will be working. Now if a scientific gardener had the management of the pit, a crop of Strawberries would be grown according to Loudon's *Encyclopædia of Gardening*, page 589, section 3344; then a crop of Melons and Mushrooms according to the above work, page 609, section 3445, and quantities of Flowers forced, pans of Annuals growing. &c. 1

agree with the writer in the *Gardener's Magazine*, vol. 9, page 48, that we, like other professions, ought to have the pretenders closely examined, and subjected to the rigid scrutiny and examination of an "Horticultural Hall."

Chicheley Hall, March 20, 1833.

WM. WHIDDON.

QUERY.—I should be very glad if any of your readers would give for insertion in the *Florist's Magazine*, a short article on the treatment of that beautiful little plant the *Lechea naltia formosa*. I have lost seven plants since last October, which were at that time quite healthy and very full of blossoms. I have kept them in the warmest situation in the greenhouse, but have failed to preserve them.

April 2d, 1833.

JOHN BELL.

QUERY.—I find the Guernsey Lily deteriorates with me the same as Hyacinth's do, and becomes weaker each successive season. If any of the readers of the *Floricultural Cabinet* are acquainted with a mode of cultivating them for several succeeding years, so as to flower luxuriantly, I should be greatly obliged by a communication on the mode of treatment.

East Lodge, Hants, April 10th, 1833.

J. PRICE.

QUERY.—I have a plant of *Elichrysum proliferum*, which is getting old and unsightly, I have tried for several years to raise a plant from a cutting, but have uniformly failed, will you, or some of your correspondents, knowing the mode of raising plants from cuttings, favour me with the particulars thereof.

ALPHA.

QUERY.—The Florists of Cambridge will be much obliged if you, or any of the subscribers to your new publication, will give them any information respecting the regulations or rules that were to be drawn up and adopted by the Florists of Manchester and its vicinity, by which Florist's Flowers were to be judged. We understood that it was principally intended for the guidance of censors at all future shows, which we thought highly desirable, as we find so much uncertainty and diversity of taste, that uniformity is wholly out of the question, as regards the merit of the flowers in the opinion of the censors. Wishing every success to your *Floricultural Cabinet*.

HANNIBAL.

P.S. I shall endeavour, at the earliest opportunity, to throw out a few hints for the guidance of the junior Amateur Florists, should you think them worthy a place in your *Cabinet*. [We shall be much obliged by the promised favour of our Friend.]

REMARKS.—I beg leave to offer a few remarks on the first Number of your periodical for your consideration. I do not like your first title, "The Floricultural Cabinet," it appears quite unnecessary and is very inappropriate. What has a Cabinet to do with a Flower Garden? The second title, "The Florist's Magazine," is very preferable, as it conveys at once a correct idea of the work and is quite sufficient. I do hope, therefore, that you will confine it to the latter title. In a work of prescribed limits like the present, *condensation is essentially necessary*. If your correspondents are too luxuriant, you can easily apply the pruning knife. In your first article for instance, the pith and marrow of the long story of cultivating Dahlias might have been given in a single page, or less. I like your reviews much; they are instructive and useful. I hope you will confine the Magazine to its particular object, and not overwhelm us with plans of hothouses, greenhouses, &c.; these are nothing more than advertisements, and ought to be transferred to wrappers accordingly. They are useless to 9 10ths of those persons likely to become your readers. A monthly list of the hardy plants and bulbs in flower upon the plan of the list in p. 24, would be of very great use to young beginners, particularly if given prospectively. With respect to the plates, I must say the first is vile in the extreme. One good plate like those in Sweet's *Florist's Guide*, of a new and really fine flower, would be worth a hundred such as the above. And as to your plate at page 20, my copy is very carelessly coloured; not only is it daubed, but colours are omitted which are necessary to delineate

the true characters of the plants. The Boquet on the wrapper is really good. A few inaccuracies in the type occur; care should be taken in this particular. Upon the whole I like your plan, though I see room for improvement, and several of my gardening friends who, as I anticipated, take in the *Magazine*, are pleased with it; but, with me, they think that your chief care should be the parterre, and that *Florist's flowers* should, as they deserve, occupy the chief place in your regard. I again beg to call your attention to the condensation of your original articles, (surplusage is unnecessary,) and to reiterate the hope expressed in my former note, that suburban gardens will meet with a due share of your attention.

SNOWDROP.

Having perused your monthly publications for March and April, under the title *Floricultural Cabinet*, I am much pleased with the matter they contain, and am greatly surprised to see the number of Plates, and so well coloured, for the low price of the work.

Chancery Lane, London, }
April 15th, 1833. }

A SUBSCRIBER.

REFERENCES TO PLATES.

1. *Utricularia intermedia*, middle hooded water Milfoil, Diandria, Monogynia, Lentibulariæ; native of Britain. Spur conical, spike two or three flowered; upper lip of the corolla double the length of the palate, and flat. Leaves divided into three linear forked segments, imperfectly dichotomous. Bladders on branched stalks, and not on the leaves. Perennial; flowers in July; grows in ditches and pools, not very common. *Utricularia*, from *Utricularius*, little bottle, applying to the roots.

2. *Veronica hybrida*, Welsh Speedwell, Diandria, Monogynia, Scrophulariæ; native of Britain. Spikes of flowers cylindrical, terminal many flowered; leaves opposite, broadly serrated. Stems erect. Root creeping and perennial. Blooms from June to August. Plant found on Craig Wreiddin, in Montgomeryshire, by Mr. BOWMAN, and on Humphrey Head, near Cartmell Wells-Lancashire. This plant differs from *V. spicata*, inasmuch as it is twice as large, with rougher leaves and stem; the leaves are also more notched, and of a grassy green. *Veronica* from the name of a Princess.

3. *Calophanes oblongifolia*, spotted flowered. (See No. for April, page 36.)

4. *Fuchsia globosa*, Balloon flowered *Fuchsia*. This most beautiful *Fuchsia* is said to have been originated by some Gentleman's Gardener from seeds cross impregnated between *F. cónica* and *F. microphylla*. The branches of *F. globosa* are decurved, from which depend, on slender pedicels, 1 inch in length, very numerous flowers—thus forming very pleasing wreaths. The flowers before expansion form so many pendulous crimson globes, and being produced in profusion, have a beautiful appearance. It flourishes either in pots or the open borders; blooming from June to October. *Fuchsia*, from M. FUCHS, a German Botanist.

HORTICULTURAL, BOTANICAL, AND FLORAL SOCIETY MEETINGS, &c.

In this department of our Magazine we shall insert in each number, accounts of one or more of the exhibitions of the Societies, forwarded to us—we shall only give in our usual Monthly Number such as contain accounts which we judge will be the most useful and interesting.—(See cover for this month.)

WILTS HORTICULTURAL SOCIETY.

The first Meeting for this year of the Wilts Botanical and Horticultural Society, held at Salisbury, on April 9th exceeded, in rare, choice, and splendid

productions, any we have hitherto witnessed. The grand plants and flowers of the East—the curious and extraordinary ones of Mexico, Peru, Brazil, Chili, &c.—the best productions of Europe, some of the best of every class, were placed round the room, with great taste and judgment. These were deservedly admired by all. We are assured, from increased exhibitors, by new subscribers, by the approving support of the Nobility and Gentry (many of whom were present,) and from the anxious attendance of all classes, that this Society is firmly established, and may truly be said to equal any one in the kingdom.

PRIZES AWARDED.

Best Stove plant—*Epidendrum aloefolium*, Mr. Downey, Gardener to W. W. Salmon, Esq.; 2d best—*Tillandsia, nova*, (new species,) Mr. Bryant, Gardener to Dr. Finch; 3d best—*Calanthe veratrifolia*, Mr. Mitchell, Gardener to Eyre Coote, Esq.

Best Greenhouse plant—*Hovea Celsi*, Mr. Hughes, Gardener to C. B. Wall, Esq.; 2d best—*Boronia pinnata*, Mr. Bryant; 3d best—*Berberis fasciculata*, Mr. Bryant.

Best bulb plant—*Amaryllis*, (spec.) Hon. Mrs. Harris; 2d best—*Amaryllis*, Colvillii, Mr. Dodd, Gardener to Col. Baker; 3d best—*Babiana stricta*, Dr. Fowler.

Best *Camellia*—*C. punctata*, Mr. Dodd; 2d best—*C. speciosa*, Mr. Bryant; 3d best—*C. eclipse*, Mr. Alford, Gardener to T. King, Esq.

Best six *Ericas*—*E. odorata*, (others no name sent us,) Mr. Hughes; 2d best *E. Patersonia*, (others not named) Mr. Bryant; 3d best—*E. vernix coccinea*, (others not named) Mr. Dodd.

Best six *Pelargoniums*, *Beauclarkia* (no name of the others) Mr. Hughes; 2d best—*Humea*, (others not named) Mr. Mitchell.

Best three *Auriculas*—Yates's Princess Amelia, (not named) Rev. J. Greenly.

Best Seedling do.—Rev. J. Greenly.

Best six *Polyanthus's*—Rev. J. Greenly; 2d best—Mr. Keynes; 3d best—John Swayne, Esq.

Best six *Hyacinths*—Mr. Squibb; 2d best—Rev. Canon Hume; 3d best—Mr. Bryant.

Best six forced shrubs—*Wistaria sinensis*, (others not named) Hon. Mrs. Harris; 2d best—*Ribes sanguinea*, (others not named) Mr. Christie, Gardener to Earl Radnor; 3d best—*Kalmia latifolia*, (others not named) Mr. Dodd.

Best four Herbaceous plants—*Phlox crassifolia*, (other snot named) to Hon. Mrs. Harris; 2d best—*Aubretia purpurea*, (others not named) Mr. Christie; 3d best—*Gœum coccineum*, (others not named) Mr. Dodd.

EXTRA PRIZES.

For *Arbutus canariensis*—Mr. Hughes.

For *Acacia, longiflora*, and *verticillata*, two large *Azalea indica alba*, and *indica coccinea*, *Dryandras*, *Banksias*, and other plants; forming a splendid collection—Mr. Bryant.

For *Crinum amabile*—Mr. Alford.

For six double *Primroses*—John Swayne, Esq.

For *Cactus hybrida*—Mr. Downey.

For *Calceolaria pendula*—Mr. Alford.

For Seedling *Azalea indica*—Mr. Dodd.

For *Kennedia coccinea*—Dr. Fowler.

Never were plants and flowers exhibited in greater beauty, and the thanks of the County and City are due to the Gardeners, for the very great perfection to which the specimens had been brought. Next Meeting will be held at Marlborough, on May 17th.

DONCASTER HORTICULTURAL MEETING.

Doncaster, Bawtry, and Retford Horticultural Society, held their first Meeting for the exhibition of Flowers, &c. at Bawtry, on April 11th. Considering the early season of the year, the show was very splendid, the productions exhibited reflected the highest credit on the skill and industry of the growers. ¹

PRIZES WERE AWARDED AS FOLLOWS:—

Best Exotic plant—*Arum bulbocodium*, Dowager Lady Galway.

Best Greenhouse plant—*Acacia armata*, Dowager Lady Galway.

Best Pelargonium—*Echinatum*, Dowager Lady Galway.

Best Camellia—Warrattah, Mr. T. K. Short

Best Erica—*Erica arborea*, H. B. Simpson, Esq.

Best Rose—Common cabbage, H. B. Simpson, Esq.

Best Hyacinth—Mr. King.

Best Pink—Forced, H. B. Simpson, Esq.

Best Azalea—*indica alba*, H. Kirk, Esq.

Best Kalmia—*angustifolia*, H. B. Simpson, Esq.

Best Hardy Shrub—*Menziesia caerulea*, Mr. Appleby.

Best Herbaceous plant—*Scilla, bifolia rubra*, Mr. Crowder.

Best Exotic Boquet—Dowager Lady Galway.

Best Hardy Boquet—Mr. T. K. Short.

Best Basket of Flowers—T. Mr. K. Short.

The following kinds of plants were exhibited amongst many others:—*Acacia floribunda*, *Blètia Tankervilleæ*. 2. *Rhododendron ponticum*, *Kalmia angustifolia*, and a pot of very fine *Cyclamens*, from H. B. Simpson, Esq. *Sparmannia africana*, *Ixia lutea*, *Azalea indica, alba*, *Cactus speciosa*, and many others from Dowager Lady Galway. *Ixia polystachia violacea*, *Arbutus Andrachne*, *Jasminum revolutum*, *Cactus speciosissimus* with ripe fruits, from T. K. Short, Esq.

The particulars of Fruits and Vegetables will be given in No. 1, of our *Gardener and Forester's Record*, on June 1st. The following individuals were elected Honorary Members, viz. Joseph Sabine, Esq., J. C. Loudon, Esq., Mr. Joseph Harrison, Mr. John Wilson, Mr. Joseph Paxton, Mr. J. Stones, and Mr. Smith, Curator of the Hull Botanic Garden.—*Doncaster Gazette*.

MONTHLY FLORICULTURAL CALENDAR.

ANNUAL FLOWER SEEDS, whether tender or hardy kinds, may still be sown; such will flower in perfection late in Summer and Autumn. (See page 43.)

AURICULAS, (see page 47.)

BIENNIALS, seeds of, should be sown, in order to obtain strong plants for blooming next year. Such sorts as Sweet William, Hollyoaks, Scabious's, &c.

CARNATIONS, (see page 23.)

CHINA ROSE CUTTINGS, (see page 48.)

CHRYSANTHEMUMS, Indian; offsets and cuttings should now be put off; striking them in rich soil, and in heat.

CUTTINGS, offsets, and slips, of many kinds, of quick growing Greenhouse plants intended for open borders, may still be struck; such sorts as *Heliotropiums*, *Calceolarias*, &c. &c. (See pages 28 and 38.)

DAHLIAS (see pages 3, 22.)

ERICAS, (see page 48.)

GREENHOUSE PLANTS, as *Fuchsias*, *Salvias*, *Maurandias*, *Lophospermum*, *Calceolarias*, *Pelargoniums*, &c. &c. may be planted out in the open borders towards the end of the month. (See page 38.)

HOLLYOAKS, may be parted early in the month.

PLANTS OF ANNUALS raised in frames or pots, may be planted out about the last week in the month. If done before that time, many of the sorts are apt to perish. In planting, care should be taken to retain all the soil to the roots that possibly can be done, or the removal may destroy the plants; they will more speedily establish themselves. It is best to plant the tenderer sorts in clusters undivided, and in a week or two thin out all not necessary to remain. Another advantage in planting as here directed is, that the plants are not injured by the heat of the sun operating upon them. Nor is there any necessity for waiting till wet weather, but the planting may be done at any time, attention being paid to water well at the time of planting, and to sprinkle water over the tops for a few nights afterwards.

POLYANTHUSES, (see page 23)

RANUNCULUSES, (see page 26,)

ROSE TREES, (see page 23.)

TULIPS, (see page 24.)

VIOLETS, beds of, may now be planted, as the patches readily part and successfully strike root immediately. (See page 48.)

LIST OF NEW AND BEAUTIFUL PLANTS,

FLOWERING DURING THE PRESENT MONTH, IN THE PRINCIPAL NURSERIES,
AT MR. KNIGHT'S EXOTIC NURSERY, KING'S ROAD, CHELSEA, LONDON.

Generic Name.	Specific Name.	Colour of Flower.	Shrub, tree, herbaceous, or annual.	Stove, Greenhouse, or hardy.	Sweet Scented.
Kennèdia	dilitàta	scarlet.	Shrub.	Greenhouse.	
Hovea	illicifolia	blue.	ditto.	ditto.	
Ditto	mucronulàta	ditto.	ditto.	ditto.	
Scòttia	dentàta	light scarlet.	ditto.	ditto.	
Ditto	angustifolia	ditto.	ditto.	ditto.	
Ditto	sp. novæ	orange.	ditto.	ditto.	
Dillwynia	glycinifolia	pink & scarlet.	ditto.	ditto.	
Chorizèma	ovata	ditto.	ditto.	ditto.	
Oncidium	lùridum	olive.	Epiphyte.	Stove.	
Ditto	divaricatum	green & red.	ditto.	ditto.	
Geissomèria	longiflora	scarlet.	Shrub.	ditto.	
Aphelàndra	crisàta	ditto.	ditto.	ditto.	
Acàcia	pentadènia	yellow.	ditto.	Greenhouse.	
Primula	púsilla	pink.	Herbac.	Hardy.	
Ditto	longifolia	ditto.	ditto.	ditto.	
Cyclamen	repàndun	purple.	ditto.	Frame.	Sweet.
Ditto	còum	ditto.	ditto.	Hardy.	
Soldanèlla	montàna	ditto.	ditto.	ditto.	
Ditto	clúsii	ditto.	ditto.	ditto.	

Caméllias Amaryllis's &c., in great variety.



Veronica Beccabunga.



Centranthus ruber. (Valeriana rubra.)



Calceolaria Wheeleri.



Sparaxis tricolor.

THE
FLORICULTURAL CABINET,

JUNE 1ST, 1833.

PART I.
ORIGINAL COMMUNICATIONS.

ARTICLE I.—*A new Arrangement of the Double-flowered Chinese Chrysanthemums, with an improved Method of Cultivation.* By A. H. HAWORTH, Esq. F.L.S. &c., Author of “Synopsis Plantarum Succulentarum, Narcissinearum Monographia,” &c.

SIR,—I have the pleasure of sending you, hereunder, a new arrangement of double Chinese Chrysanthemums for insertion, if you please, in an early Number of your interesting and useful publication.

To the new, and, I hope, improved location in my distribution of these fine and much favoured plants, are added some brief but characteristic descriptions of their size, time of flowering, and appearance of their flowers; together with an epitomised method of the management, soil, and cultivation they require. And they are well worthy of all the care and attention we can bestow upon them; being not only at present one of the finest hardy herbaceous groups in the flower-garden, and remaining with us in bloom by much the latest; but they will hereafter, through the medium of their very sportive seeds, become far more numerous, more various, more beautiful, and more attractive than ever.

Seven years have passed away since any published information has been added to our knowledge of these hardy and conspicuous flowers; the last account, as far as the writer can find, being that

given by Mr. Sabine, in the *Transactions of the Horticultural Society*, vol. v. p. 322, &c., dated Jan. 1826; in which 48 species or varieties are enumerated, but without any sections, divisions, or subdivisions whatever, and with insufficient attention to their natural affinities; which renders it very difficult for any one, and more especially a tyro, to appreciate and understand them sufficiently. Wherefore I send you, hereunder, what I conceive to be an improved and more natural arrangement of them, nearly as far as known to me; referring them to, and identifying them with, Mr. Sabine's varieties in every instance, as far as practicable, and likewise to published figures wherever I have been able to find any.

I possess, alive, several other reputed varieties; but these, at present, I refrain from mentioning, hoping to describe them more completely another year, when I may know more about them, and be better able to appreciate their characters. There have also very recently been raised, and flowered, various seedling varieties, which were exhibited at the December meeting of the Horticultural Society of London, which were chiefly obtained from seeds of the Early Blush, the Early Crimson, and the Two-coloured Red. These, however, I must abstain from further mention of at present.

There have been various methods recommended for the cultivation and propagation of these showy plants, and that by cuttings in May is now almost universally adopted. But I do not approve of this for strong fibrous-rooted, hardy herbaceous plants with late autumnal blossoms; for critical time is lost by the delay of striking the cuttings; and, if they are accelerated by heat and glass, they are (more than any other plants) debilitated, weakened, and dwarfed, and often lose their lower leaves by the time their flowers are open, having a faint and sickly appearance, instead of the vigorous growth of such roots, if annually parted and transplanted like perennial asters or other hardy perennial plants.

I recommend their voracious and very fibrous roots to be parted in autumn, or early spring, and planted in very rich manured light soil, at the foot of a south or west aspected wall, with not more than one, two, or three branches from each root, trained to the wall as regularly and as thinly as a peach tree, cutting off all superfluous shoots and weak lateral flower-buds.

They must, when planted, be watered in the usual way, and

afterwards, all over their leaves, with a fine rose watering-pan, lightly as a fine slight shower, as often as their foliage flags, quailing to the beams of a powerful sun, which will sometimes be three times a day in the hottest weather. This will quickly re-erect their drooping leaves, without scorching or blistering them, and cause these uncommonly slow-growing plants to advance with a degree of comparative rapidity that is as pleasing as it is surprising, and their leaves will become twice as large as when treated in the usual way. The size of this foliage, too, as in bulbous and most other plants, will indicate the increase of size also in the expected but as yet invisible flowers; although in *Succuléntæ*, and more especially in *Ficoidæ*, I should expect the reverse.

Thus treated, these conspicuous plants will reach the height of 3 or 4 ft. in the smaller sorts, and that of 7 and 8 at least in the tallest kinds, terminating in abundant and most beautiful flowers, many of which will far surpass 5 in. in expansion, and with almost every colour, except deep scarlet and the tints of blue.

But other aspects than the south or west, and even the open borders in very favourable seasons, will suit the greater part of these plants near London tolerably well, and enable them to open their flowers, though much later and smaller than those against a south-aspected wall, where they will expand every season; and, if properly blended as to colour, at the middle and end of every November, they are capable of making a more showy and magnificent appearance of flowery beauty, richness, and elegance, than I ever beheld in any other group. The duration of their hardy flowers is likewise greater than that of other autumnal plants, both as to individual blossoms, and in the lateral successional ones, and even when cut for bouquets and placed in vessels of water; one plant of the old purple, in my garden, having had flowers from the beginning of November last, to the second week in the present January. But the earlier they can be made to come into blossom, by open-air treatment (for all forcing irretrievably weakens them), the better, and the longer will be their duration, and the finer their soft but agreeable chamomile scent.

Notwithstanding these deserved eulogies, Chinese chrysanthemums have not hitherto ranked with the true flowers of the florist, because, however well formed, in many of the varieties, they are all, save the Gold-bordered Red, of self or uniform colours; and

the florist requires yet another colour or colours to be distinctly depicted upon the first or ground colour of every petal, to constitute his favourite flakes, bizzarres, and picotees.

This grand desideratum in Chinese chrysanthemums will, however, be finally accomplished through the seeds of well-formed half-double or double flowers, particularly those of my first section, called ranunculus-flowered; one of that section, the above-mentioned Gold-bordered Red, having already a fine form, and the rudiments of a flaked flower; its broad-edged border, base, and tips, often leaving, when well blown, a comparatively huge single flake of red in the central length of every petal. We must try the seeds, whenever we can procure them; and their unequalled sportiveness will reward us for the trouble of rearing them, by countless numbers of new forms, faces, and colours, surpassing all we at present know.

The sports of colour in the flowers, by casual branches from old plants, are well known, and capable of being propagated and perpetuated; and I shall notice them in my arrangement below, in every instance, as far as known.

In closing this paper, I beg leave to return my grateful thanks to the following gentlemen and nurserymen, for living roots of nearly the whole of the plants which compose this paper; who, on hearing I was studying Chinese chrysanthemums, generously offered me any part of their nearly complete collections, which I thankfully accepted:—

The Rev. Mr. ELLICOMB, Bitton Vicarage, near Bristol; Mr. INGPEN, Wellesley-street, Chelsea, who has nearly a complete and well-named collection; Messrs. YOUNG, Nurserymen, Epsom, near London, who have a very fine collection; Mr. TATE, Nurseryman, Sloane-street, Chelsea; and Mr. DENNIS, Nurseryman, King's Road, Chelsea, who has very nearly a complete and accurately named collection.

I remain, Sir, yours, &c.

Chelsea, Jan., 1833.

A. H. HAWORTH.

A new Arrangement of Double-flowered Chinese Chrysanthemums.

* **RANUNCULUS-FLOWERED.**

1. *Yellow Indian*, Hort. Trans. v. 4, p. 330, tab. 12, and v. 6, p. 346. Of short stature (in its group), with very late and double, but small, flowers; and forms, with the next, a distinct species.
2. *White Indian*, Hort. Trans. v. 6, p. 347. Shorter than the preceding, with very late and similar, but white, flowers.

3. *Warralah Qellow*, Hort. Trans. v. 6. p. 344. Flowers very late, with the preceding, and of similar size, but has much more entire leaves, and larger flowers, which make it a distinct species.
4. *Spanish Brown*, Hort. Trans. v. 4. p. 486. and v. 5. p. 420. Of short firm stature, and rather early and beautiful flowers, the size of the preceding, and with smallish leaves, a little more pinnatifid, and probably a distinct species.
5. *Blush Ranunculus-flowered*, Hort. Trans. v. 6. p. 328. Of short firm stature, and fine-formed early flower, of a bluish colour, and peculiar neatness of form. I think I have two variations of it.
6. *Small Deep Yellow*; *Park's Small Yellow*, Hort. Trans. v. 6. p. 327.—Taller and weaker than the last, early and small-flowered, with small and blunt pinnately-lobate leaves. Perhaps it may be a distinct species, from its small leaves and flowers.
7. *Small Pale Yellow*; *Small Windsor Yellow*, Hort. Trans. v. 5. p. 415. and v. 6. p. 335. Also called Aiton's Yellow. Of short stiff growth, and early flowering, and but little merit.
8. *Small Flat Yellow*; *Small Yellow*, Hort. Trans. v. 5. tab. 17. and v. 5. p. 422. Of shortish growth, and with pure yellow and expanded early flowers, the shape and size of the three subsequent varieties, of which it is presumed to be the origin, as yellow is the most predominant colour in these plants. Their forms are very neat and regular.
9. *The Buff, or Copper*, Hort. Trans. v. 5. p. 420. Also called the Orange, or Buff. Resembles the preceding in every thing but colour.
10. *The Rose, or Pink*, Hort. Trans. v. 4. p. 344. Also called the Lilac.—Resembles the last in all things but colour, and is now the most common kind in cultivation, although introduced after the old purple, hereunder enumerated.
11. *The Pale Pink*, Hort. Trans. v. 6. p. 336. Raised in Mr. Colvill's Nursery, being a sportive branch from the last, and differing in nothing but colour. This and the three preceding doubtless sport mutually into each other, and are perpetuated by cuttings of their respective sports in the first instance, and offsets as well as cuttings afterwards; but are all liable to sport again, from pale pink through deeper pink, and copper or light orange to bright yellow: but their shoots and leaves are immutable.
12. *Expanded Light Purple*, Hort. Trans. v. 5. p. 153, and v. 5. p. 421.; and Bot. Mag. tab. 2256. Of middling size, and with flowers in the middle season (of its group,) but nearly twice as large as the last, though resembling it in form, and far more handsome.
13. *Quilled Light Purple*, Hort. Trans. v. 5. p. 145., and v. 5. p. 421. A sport only from the last, but now made permanent.

** INCURVING RANUNCULUS FLOWERED.

14. *Incurving Lilac*, Sweet, Brit. Fl. Gard. tab. 7.; *Curled Lilac*, Hort. Trans. v. 5. p. 155. and p. 421. Also called the Quilled Lilac. Grows tall, and flowers early, and is an elegant plant, allied to the preceding, and has produced the following one from a sportive branch.
15. *Curled Blush*, Hort. Trans. v. 6. p. 326. Has been called the Double Blush, and Double White. The flowers, which are rather early, large, and showy, dying off nearly of that colour. It is of middling stature in its group; and, although a sport only of the preceding, is now an established and more beautiful variety than it.
16. *The Quilled Pink*, Hort. Trans. v. 4. p. 350. and v. 5. p. 351. 420, 421; and Bot. Reg. v. 8. tab. 616. Of tall stature, and one of the very latest in blooming; but very handsome, and repaying by its beauty every care bestowed upon it by the gardener. It has been called the most beautiful of all; but with me it yields to the Gold-bordered Red.
17. *Large Quilled Orange*, Hort. Trans. v. 5. p. 152. tab. 3. (upper figure,) and v. 5. p. 421. A tall and large latish-flowering variety, of considerable beauty, and at present uncommon.
18. *Gold-bordered Red*; *the Two-coloured Incurved* of Hort. Trans. v. 6. p. 332, 333. Of tall stature, very late, with the most perfect and beautiful

flower of all its genus, although only of the middle size. The red petals are striped with gold beneath, and golden-tipped there; which tips, incurving strongly and gracefully, show the gold in a front view of the flower; which is golden likewise at its base within. I consider it the most complete of all.

19. *The Superb White*, Hort. Trans. v. 4. p. 338. and v. 5. p. 420. A late, very tall, and splendid plant, with large, incurving, very double, pure white flowers.

***CHINA-ASTER-FLOWERED; often showing a disk, and then much resembling China Asters.

20. *The Sulphur Yellow*, Hort. Trans. v. 4. p. 341. and v. 5. p. 420. A beautiful variety, of tall stature, and free and early blooming, with middle-sized aster-like flowers.
21. *The Two-coloured Red*, Hort. Trans. v. 6. tab. 4. and v. 6. p. 342, 343. A very fine and showy variety, of the middle size in stem and flowers, but rather late, which sometimes shows a disk, and is then very aster-like. The bipinnatifid leaves are far more lacinated than any other kind; and I think they constitute it a distinct species.
22. *The Early Crimson*, Hort. Trans. v. 5 tab. 3. (inferior figure) p. 151. and p. 421. Of light and small stature, delicate, and apt to lose its leaves before its bloom is finished. The flowers are middle-sized, early, and very beautiful; they show a disk, and, when well managed, have ripened perfect seeds in England.
23. *The Clustered Pink*, Hort. Trans. v. 6. p. 336. Also known by the name of the Changeable Blush. One of the tallest of its tribe: flowers in the middle season very abundantly; and, although the flowers are but middle-sized, and little better than half double, showing a considerable disk, and greatly resemble the China Asters, they make a very fine and durable appearance, standing the weather well, and becoming much darker by age, though less delicate. This is a very likely variety to produce seed in this country.
24. *The Early Blush*, Hort. Trans. v. 6. p. 326. This tall and almost unequalled variety is also called the Double Blush, and Double White. It flowers very early, beautifully, and freely, and its flowers are large, and scarcely show any disk; and their colour without is light blush, but within they are exactly of that peculiar tint well known by the name of French white; and like many other varieties, they are very durable. They have ripened seeds in England.
25. *The Paper White*, Hort. Trans. v. 5 p. 417. 422. This exquisitely white flowering and noble variety is of tall stature, and early blooming, and makes a splendid appearance in a general collection. Its flowers are of the middle size.

****MARIGOLD-FLOWERED; with well-formed double flowers, resembling Double Cape Marigolds in shape and size.

26. *Golden Bronze-back*; *Golden Yellow*, Hort. Trans. v. 6. p. 345. and Bot. Reg. tab. 4. (superior figure). Also called the Large Yellow and the King's Yellow. A very tall, handsome, and free-flowering variety. The flowers are early, and of a high rich yellow colour, but bronzed or orange in the buds and on their outsides. This is one of the best to grow as a standard; and, if parted at the root and annually transplanted, succeeds very well as a herbaceous plant, especially if in a warm or sheltered situation, duly supported by a stick.
27. *The Superb Clustered Yellow*, Hort. Trans. v. 5. p. 156. and v. 5. p. 421. and Sweet's Brit. Fl. Gard. tab. 14. One of the finest and tallest of the group, being higher than the preceeding, and with more clustered, and more neatly formed, pure yellow flowers, but they are later in opening.
28. *The Golden Lotus flowered*, Hort. Trans. v. 6. p. 340. A very splendid and large long-leaved variety, and nearly or quite the tallest of this genus of plants; having late pure and deep yellow flowers, above the middle size, and larger than those of any other yellow kind of the marigold

form, and which partially endure until the heavier frosts of winter destroy them.

20. *The Changeable Pale Buff*, Hort. Trans. v. 6. p. 380. and tab. 3. Also called the Pale Cluster. This plant when flowering is perfectly as it is represented on the above cited table, is one of the most showy and splendid in the group; but this has not been the case during the autumn of 1832; all the flowers, and in various gardens, which met the writer's eye, being, as it were, degenerated into almost buff-coloured and spuriously quilled flowers, of more upright appearance than the large, expanded, flat-petaled, and variegated purple whitish and yellow-buffy ones so charmingly depicted in the figure cited. They are of the middle season.
 30. *Starry Changeable Purple*; *The Starry Purple*, Hort. Trans. v. 6. p. 339. This beautiful plant is one of the most variable-flowered in the genus; its very late flowers first opening of a purple colour, with the exterior petals at first few in number, starry, and paler, especially at their expanded spoon-shaped tips, soon, however, becoming still more pale until the whole expanded and very double blossom becomes regularly more bluish coloured and white, than purple, and is a very fine, well-formed, variegated flower. The stature of the plant is of the middle size, but its remarkable leaves are much more lacinated than usual, and often broader in their outline than long, which is not the case with any other in the group, and of very considerable size. Wherefore I conceive it may be a distinct species from all the others.
 31. *The Late Purple*; *The Late Pale Purple*, Hort. Trans. v. 5. p. 413, and v. 5. p. 422, and v. 6. p. 333. Also called Large Pale Purple. This is a very late-flowering and rather tall variety, whose middling-sized and well expanded blossoms are very neat, and resemble in shape those of the preceding, but are much smaller.
 32. *The Brown Purple*, Hort. Trans. v. 6. p. 341-2. A tall and slender-twiggd very late-flowering variety, whose middle-sized flowers resemble the last in shape, but are not quite so flat and neat in expansion, and their colour in the group is very remarkable, being of a very dull brownish or reddish purple. The leaves are so small, and so bluntly lobed, and on such slender shoots, terminating in such long and graceful peduncles, that the plant is probably a distinct species from *Chrysanthemum sinense*, and differs, not so much in leaf as in flower from our No. 6, the Small deep Yellow; above.
- ***** TASSEL-FLOWERED; being tall or very tall plants in their genus, with very large double, and more or less conspicuously drooping flowers, whose petals are usually elongated and quilled, and often greatly resemble the form of a tassel.
33. *The Tassel Flamed Yellow*; *The Quilled Flamed Yellow*, Hort. Trans. v. 4. tab. 14. p. 349. and v. 5. p. 421. The magnificent flowers of this tall plant appear rather late, and often measure above five inches in expansion; and make perhaps, if not a more neat at least a more showy appearance than any other of the group, being double, and composed of innumerable chiefly quilled incurving petals, hanging more or less downwards, and when at their best resembling a flame coloured tassel.
 34. *The Tasseled Salmon*; *The Quilled Salmon*, Hort. Trans. v. 5. tab. 17. p. 414. and p. 422. This is a late-flowering, slender, and graceful plant, with large tassel-like, and half-expanded drooping quilled salmon-coloured flowers, and is very uncommon,
 35. *The Tasseled Yellow*, Hort. Trans. v. 6, p. 329. A very tall and strong-growing large leaved variety, with numerous tassel-formed flowers of the largest and most showy kind, often measuring more than five inches over, and appearing rather early. It is one of the most desirable and free-growing of the whole collection.
 36. *The Quilled Yellow*, Hort. Trans. v. 4. p. 341. and v. 5. p. 420. This is a tall variety, with rather large flowers, of the middle season, or later, producing its blossoms in clusters at the top of the strong upright shoots. It is also known by the name of the Quilled Straw.

37. *The Late Quilled Yellow*, Hort. Trans. v. 6. p. 343. This has been called a very late and not very desirable variety in collections. It appears to be of the middle size, but it has not yet opened its blossom buds with me, not having long possessed it.
38. *The Large Lilac*, Hort. Trans. v. 4. p. 343. and v. 5. p. 420. Also called the Late Lilac, the New Lilac, and the Semidouble Purple. A very tall upright plant, bearing but few double large and clustered flowers at the summits of the branches, and those so late in appearance, that in cold seasons they cannot expand well, and are consequently in but little repute. I have only seen one plant in blossom, and that in my own garden.
39. *The Tasseled Lilac*, Hort. Trans. v. 6. p. 332. A middle-sized, or rather tall, plant, of very great beauty, and one of the most desirable of the whole group, having very showy tassel-formed flowers, five inches or more in expanse, very numerous, early, and elegantly drooping from their weight, but they often show a disk. It is a likely variety to produce seeds of the most promising kind, but I have not hitherto heard of its ripening any in England.
40. *The Tasseled Purple*; *The Purple*, Hort. Trans. v. 4. p. 334. Has also been called the Old Purple, the Old Red, and the Quilled Purple, and is figured in the *Bot. Mag.* tab. 327. This is a very beautiful and rather early-flowering plant, of almost the middle size. The flowers are very numerous, gracefully drooping, and of middling size, and are at first of reddish purple colour, but become paler by age, and in mild seasons will continue in succession from the end of October to the second week in January. It acquires the name of Old from being the first China chrysanthemum that came to England in modern times, and bloomed at Mr. COLVILL's nursery, in Nov. 1795, but was said to be at Kew in 1790.—The great horticulturist MILLER, certainly had one, or more likely two, of the Chinese, or Indian, chrysanthemums, in cultivation at Chelsea long before; but it is not yet quite satisfactorily explained what sorts they were. See Hort. Trans. v. 4. tab. 12. p. 326, and following.
41. *The Changeable Tasseled White*; *The Changeable White*, Hort. Trans. v. 4. p. 336. and v. 5. p. 419, and *Bot. Mag.* tab. 2042. It has also been called the Old White, being the first white-flowered variety known in our gardens. It is recorded in the Hort. Trans. to have been raised from a sporting branch of the preceding, and, indeed, resembles it in every thing but colour. It is a very graceful and elegant plant, and in warm situations its flowers are often more or less tinged or dotted with purple or blush colour.
42. *The Narrow Quilled White*; *The Quilled White*, Hort. Trans. v. 4. p. 337. and v. 5. p. 419. This rather slender variety is almost of the middle size, and has the slenderest and most completely quilled florets, and the earliest flowers, of the whole group, which hang in gracefully drooping tassels, and form a strong contrast to the next in almost every respect.
43. *The Great Tasseled White*; *The Tasseled White*, Hort. Trans. v. 4. p. 339. and v. 5. p. 420. Has also been called the Expanded White. This large, strong and broad, deep-green, shining-leaved variety is one of the latest of all in blooming; but its lovely flowers are larger and more showy than those of any white-flowered variety, and endured to the end of January, 1833, the date of the present paper. No flower in this chilly climate stands the cold so well, or so long continues to beguile the fancy of a florist by its protracted opening, by its hardihood in expansion, and by the soft hue of its snowy blossoms; carrying on, as it were, the flowery beauty of lingering autumn into the very bosom of winter, whose ice at length closes the temple of Flora for a time, until the herald flowers of spring appear amidst the melting snow, as if impatient of delay.

“When Flora with her pleasing powers,
Shows to the Sun her earliest flowers.”

***** HALF-DOUBLE TASSEL FLOWERED; with only half-double flowers, and narrow elongated quilled petals; often drooping, and somewhat resembling a tassel.

44. *Half double Quilled White*; *Semidouble Quilled White*, Hort. Trans. v. 5, p. 158. A very tall, robust variety. The flowers are among the latest varieties, and more inclining to be single than usual, yet of too late occurrence to ripen seeds with us. They are very large, and the narrow quilled petals are very singularly waved, and as if pursuing each other from right to left, making a pleasing and almost animated appearance.
45. *Half double Quilled Pink*; *Semidouble Quilled Pink*, Hort. Trans. v. 5, tab. 17,* (inferior figure) p. 157, and v. 4, p. 422, and v. 6, p. 351.—This variety grows rather tall, and flowers latish, but its flowers, although but half-double, and only of the middle size, possess a degree of graceful elegance and lovely hues peculiarly their own. It is at present a rare variety.
46. *Half-double Bronze Buff*; *Pale Buff*, Hort. Trans. v. 6, p. 334. Also called the *Semidouble Pale Buff*, and *Reeve's Pale Buff*, and *Quilled Buff*, and the *Buff*. It is a very tall and free-growing variety, and its half-double buff large flowers, which in their early stages are much bronzed, though of coarse hues, make a showy appearance, and stand the weather better than all others, opening rather early, and continuing late, until all the bronze is gone, having faded to a dull buff.
47. *Half-double Quilled Orange*; *Semidouble Quilled Orange*, Hort. Trans. v. 5, p. 412 and p. 422, and v. 5, tab. 17** (left-hand figure), and v. 6, p. 352. A latish plant, with but few large and almost single, and also some nearly half double flowers, of good size, but making a poor show.
48. *Half-double Pale Quilled Orange*; *Semidouble Quilled Pale Orange*, Hort. Trans. v. 6, p. 337. Also called *Semidouble Deep Yellow*. Of the middle stature, with few and late flowers, of good size, but comparatively poor appearance, on loosely drooping footstalks.

P.S.—The author has rejected the hybrid word *semidouble* throughout the Paper, and given the pure English one of *half-double* instead of it.

All the above enumerated plants are capable of growing very freely from cuttings, taken from any part prior to the full expansion of their most beautiful flowers, if planted even in the open air, duly watered, and shaded from the sun only until they strike roots. But after blooming, very few cuttings will succeed unless taken from near the crown of the root, nearly the whole of which cuttings will grow well except when the ground is frozen. Nevertheless, I would recommend cuttings, intended to perpetuate sporting plants, to be struck under a frame or bell-glass, in the usual way.

A. H. HAWORTH.

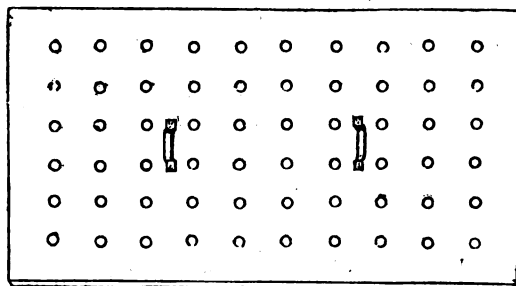
[Nearly the whole of the above very valuable Paper on *Chrysanthemums* has been published in the last Number of the *Gardener's Magazine*. Our opinion of its value was such, that we wrote to A. H. HAWORTH, Esq., its author, to allow us to publish it in our Magazine. That gentleman had given the Paper to J. C. LOUBON, Esq., conductor of the *Gardener's Magazine*, who, on being applied to, most generously gave us permission to insert the article entire. For the favour we beg to tender our best thanks to the above Gentlemen. A supplementary article on some other sorts of *Chrysanthemums* will appear in a subsequent Number.]

ARTICLE II.—*On the Culture of the Ranunculus.* By MR. JAMES MILES.

Observing the remarks of Mr. CARR on the Culture of the *Ranunculus* in your second Number of the *Floricultural Cabinet*, I beg leave to offer you my mode of planting and managing that beautiful flower, having cultivated it for the last twenty years.

M

The preparation of the border, in the following manner, where they are to be planted, is essentially necessary; and in order to have a good bloom, as soon as the roots are taken up (for I always plant in the same ground), I begin to dig the border two feet deep, and expose it to the sun to pulverise and sweeten, turning it once a month, always taking care to do it in fine weather. About the last week in September, I throw up the border in small ridges crossways, about four inches high, for the frost to mellow it till planting time, which is generally about the last week in January, or the first week in February. At that time, if the weather should prove fine, I rake down the border as level as possible; I then take a garden line and stretch it exactly over the middle of the bed, so as equally to divide it in two, and then mark out the distance the roots are to be planted, by means of a board made for the express purpose (see figure); the holes are cut through with an



inch and a half centre bit, exactly four inches apart, and a dibble, cased with iron, to go through the board, exactly one inch deep; after placing the board close to the line, I begin making the holes and putting in the roots, and when the whole of them are planted, I cover them one inch deep with a rich loam that has been previously prepared, consisting of two-thirds of trenching earth, sward and all, and one-third rotten dung from a cucumber-bed, turned three or four times before using. This method of planting can be done in considerably less time, which is of great advantage at this season of the year, especially where a person has eight or ten thousand roots to plant under name, and the roots are all one depth in the ground. About the month of May, they begin to show the flower-stem, and should it prove dry weather, they will require frequent watering, which should always be given between the rows.

When the blossom expands in June, I then take the covering from the Tulip bed, (the Ranunculus bed being of the same dimensions) and cover them, so that I have an opportunity of viewing them sheltered from the intense heat of the sun, which if suffered to shine on them, would injure and destroy the colours, particularly the fine purples and blacks. In about a month or six weeks after the bloom is over, I take up my roots in a fine day, each sort in a brown paper bag, with the corresponding number of the tally in the border, and place them in a room where there is plenty of air to dry gradually. After they are once thoroughly dry, they must be kept so, as the least damp would mould them; there they remain till next season, and are then planted in the same border prepared exactly as described above, and I have never failed to have a good bloom. Many persons who grow Ranunculuses are fond of planting in a fine light loam, but nothing is more injurious to the roots, and especially if they are planted late (say March;) the dry weather comes on them immediately, and they have no time to strike deep in the soil, and if they had, it is too light to hold them; they love a rich, firm, and heavy soil; and wherever you see the Gilt Cup (*Ranunculus ficaria*, &c.) grow luxuriantly, that soil is the fittest to mix with dung for the purpose of growing them. Should these remarks, which have been the result of 20 years' experience, prove acceptable to your respectable correspondents, at some future time you may hear from me on the culture of Tulip, Carnation, and raising the Ranunculus from seed.*

Hilperton, near Trowbridge, Wilts, }
April 13, 1833. }

JAMES MILES.

N.B. Please to inform your correspondent, Mr. T. J. RISBY, that J. M. can supply him with Polyanthus, Carnations, Ranunculuses, Pinks, and Tulips, by a letter addressed as above, all under name.

* The promised communications from Mr. MILES will be very acceptable, and we shall be much obliged by receiving them.

ARTICLE III.—*On the Cultivation of the Solandra grandiflora.* By W. K.

Having two Numbers of the *Floricultural Cabinet* put into my

hand the other day, I observed in the first Number amongst other Queries, what is the best method of cultivating the *Solandra Grandiflora*, so as to bloom it well ; and seeing no answer to it in the second Number, I beg to offer to your Correspondent, through the medium of your Magazine, my mode of proceeding with two plants, one of which is under my care. About ten years ago I received cuttings of the *Solandra Grandiflora*, which I found of very easy propagation, rooting readily in moist heat, after having struck root. I selected two of the finest plants, which I potted singly into small pots, in a rich light soil, in which they flourished very freely, running with one stem somewhat similar to the young shoot of a vine. The following Spring the plants were potted into larger pots, and one of the two plants was cut down to within eighteen inches of the pot, which soon after sent out seven or eight shoots from the sides of the stem ; afterwards being kept rather dry, it flowered the following year in March, on the ends of the branches, and it has every year since produced from ten to sixteen of its showy flowers, measuring nine inches long, and four inches across the cup. The same plant at present remains in a good state of health, of a bushy shrub-like appearance. When the flower buds make their appearance, the plant is watered rather freely, with the view of making it throw out abundance of flowering shoots for the next season ; when these shoots grow more than two or three inches in length, water is immediately withheld, and any shoots that may have run longer than the others are cut back to two or three inches long to make them produce more flowering branches for the next year. The other plant mentioned that was left uncut, was trained to a trellis in a pine stove, and regularly watered when dry for several years, which no doubt was the cause of its great luxuriance of growth, but it produced no flowers.

I subsequently tried it by keeping it very dry for several years, but never was favoured with so much as one flower for my trouble, and it was eventually thrown out.

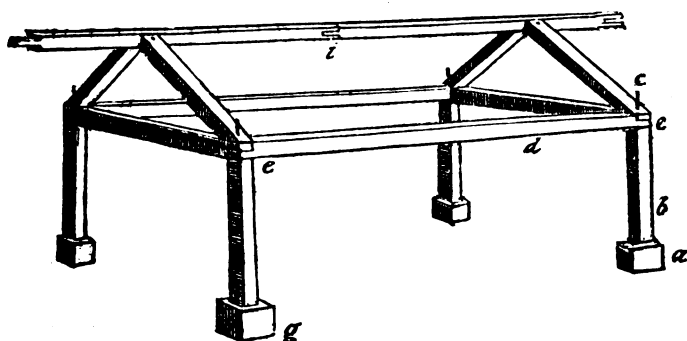
If you think the above mode of treatment deserving publicity, I shall have much pleasure in seeing it inserted in the Magazine.

W. K.

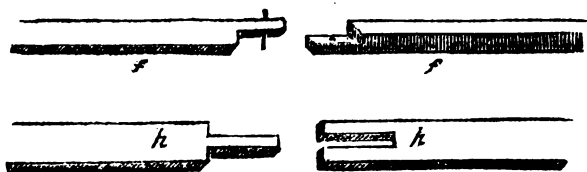
**ARTICLE IV.—On a Moveable Frame for Tulip Beds,
&c. By W. P. B.**

IN answer to SNOWDROP, who enquires respecting a moveable awning, &c. for Tulip and Ranunculus beds, I beg to inform him that I cultivate a bed of Tulips and another of Ranunculuses, and the frame and covering I use is made after the following construction :—

I have wooden sockets (*Fig. 1. a.*) inserted in the ground eight



inches deep, and about nine feet apart from *a* to *g*. Into them I have a corresponding number of upright posts, (*b*) each being three inches square at the sides, and having a wire peg (*c*) at the top three inches long. On the top I affix a rail (*d*) two inches by one inch, which is joined to corresponding rails at the upright posts (*e e*) and fix on the peg (*c*.) The rails are formed at their ends to underwrap each other, as (*f f*.) The roof is of sufficient slope to carry off the wet, the ridge of which is composed of several pieces; these are about three inches deep, and from half an inch to three quarters thickness, formed at the ends for insertion into corresponding pieces, as (*h h*.) The joining of the ridge pieces



is always in the centre of each division of the frame, as at (i,) which keeps it very steady. By the ridge being formed of separate pieces, the frame is much easier removed than if in one piece, and is capable of being placed to beds of different lengths. The same kind of sockets are affixed along my *Ranunculus* bed as well as the Tulip bed. I have, therefore, no more trouble than merely taking off the ridge pieces, then each piece of the roof, and lastly the uprights, which I insert into the sockets of the *Ranunculus* bed. The removal and affixing does not occupy more than a quarter of an hour. If you judge the above description of my awning, &c. worthy a place in your *Cabinet*, I shall feel obliged by its insertion.

A well-wisher to your undertaking.
Hull.

W. B. P.

ARTICLE V.—*On the Culture of the Tuberose.* By Mr.
F. F. ASHFORD, Gardener.

I herewith send you for insertion in the pages of the *Floricultural Cabinet*, the following method of cultivating the Tuberose, by which means I have succeeded in bringing this beautiful Exotic to great perfection, and which will, after a fair trial, be found to answer every expectation. For the information of your juvenile readers, I have added a short Botanical account of the plant, &c.

Poliánthes tuberôsa, or common white Tuberose, is a native of Italy and the East Indies, first imported into Great Britain in the year 1829, and is now become a great traffic between Dutch and English nurserymen. The generic name was given it by Linnaeus, taken from polys many, anthos a flower, owing to the abundance of blossoms it produces. The specific, by Willdenow, taken from the root (*Radix*) being tuberous, that is, the root consisting of fleshy bodies connected by slender fibres. It belongs to the 6th class and 1st order. Hexandria (hex 6, aner a man, or male organ.) Monogynia (monos 1; gyni, a woman, or female organ) of the Linnean classification, and to the order Hemerocallidea in the Jussieuean, or natural arrangement of plants. Its continental names are La Tubereuse, Fr.; Die Tuberose, Ger.; Tuberoos, Dutch; and Tuberos, Swedish. There are two species and one

variety of this genus, viz. *P. tuberosa*, *P. tuberosa flora plena* (the subject of the present paper), and *P. gracilis*, or slender-leaved Tuberose.

In the autumn provide a quantity of compost, composed of the following materials :—two wheelbarrows full of light maiden loam, one ditto of decomposed hot-bed dung, and a little white sand, well chopped and mixed together at different times during the following winter, for the frost to ameliorate and decompose it. In the month of February, prepare the bulbs by taking off all the loose rind and superfluous offsets, or side bulbs, being careful not to injure the principal one. Then provide a sufficient quantity of pots (the size should be $7\frac{1}{2}$ in. by $6\frac{1}{2}$ in.), well drained with broken potsherds ; they must be filled with the above compost, and well shaken down, but not pressed with the hands. A little white sand must be placed in the middle of the top of the compost, and the bulb must be pressed gently, though firmly, down with the sand, to within a quarter of an inch of the top of the bulb. Some cultivators use finely-pounded stone, commonly called grit in this county (Cheshire), instead of sand, which answers the purpose very well.

After the bulbs are potted, plunge them in a strong hot-bed, where they must remain till they have grown to the height of three or four inches ; they must be kept quite close till they begin to vegetate, when a little air may be admitted ; shaded when the sun is powerful, and covered up with mats at night ; water must be supplied very sparingly while they are here, for the steam arising from the bed answers, in a great measure, the purpose of water. When they have grown to the height above stated, take them to the stove, allowing them a plentiful supply of air and water, setting them in a place where they will get plenty of light, or they will be apt to draw up weakly. As they advance in growth, tie them carefully up to green sticks 6 or 7 feet long, well rounded at the bottom ; care must be taken not to tie them too tight, or else their stems will become ill-shapen and crooked, and they will flower weakly. Here let them remain till they are in flower, when they must be removed to the conservatory ; and when set among other exotics, they will, by their beauty, add to the gaiety and grandeur of the house, and shed around their fragrant odours, every even and morn when the house is closed, such that

cannot be conceived but by those whose fortune it is to grow them well.

I have thus endeavoured to pen down my process in as plain and brief a manner as possible, humbly hoping that these few remarks may prove of some utility to some of your numerous readers; assuring them that they are not mere theoretical opinions, but the method detailed is the result of some years' experience, which induces me to communicate them.

LOUDON, in his *Encyclopædia of Plants*, page 255, informs us that it is R. A. SALISBURY's opinion, that we might grow our own bulbs by planting the offsets in such a situation as would obtain for them a sufficient degree of heat in summer to bring their leaves out to their full magnitude, and their bulbs to their proper size. The theory, he adds, which I would recommend, is to keep the offsets growing as freely as possible, from May to October, but in a complete rest and drought for the remainder of the year.

F. F. ASHFORD.

Mere Hall, Knutsford, April 11th, 1833.

ARTICLE VI.—*On the Cultivation of Pelargoniums, (Geraniums.)*—By MR. APPLEBY, Nurseryman and Florist, St. James's Gardens, Doncaster.

As it is desirable to keep old plants of Geraniums with a young and healthy appearance, also to have them in small pots during the winter season, when the Greenhouse is crowded, the following method is what I adopt, and strongly recommend :—

After my Geraniums have flowered, I cut them down pretty close; this is done generally about the middle of August; they are left in the pots in which they flowered to push out new buds, and when the buds are about a quarter of an inch long, I take the plants out of the pots, remove all the earth from the roots, thin the main roots, and shorten the others to make them sufficiently small for the sized pots which one-year-old Geraniums are generally kept in during the winter. The root-pruning enables me to bring them within the compass of a small-sized pot, causes a new formation of rootlets, and gives me the opportunity of supplying the plant with fresh material to grow in, which, though much smaller

in quantity than it previously grew in, contains more nourishment than all the old exhausted soil which the larger pot contained.

If I were to disturb them before the new eyes are pushed out, it is probable that many of the plants would not recover the removal, as their strength would be impaired by being disturbed and pruned. After they are potted, I put them into a cold frame or pit, and shut them up close till I think they are well established in their new soil; I then expose them to the air to harden, and as the cold weather approaches I take them into the Greenhouse with the other plants. In the spring they require removing into larger pots to flower, and by repotting them two or three times during summer, a succession of flowers are produced for a much longer time than Geraniums that are treated in the ordinary way. If Geraniums are thus attended to every year, they will always be in a healthy state, well furnished with half a dozen, or more, branches instead of being tall, slender, and sickly-looking.

SAMUEL APPLEBY.

ARTICLE VII.—*On Raising Double-flowering Stocks from Seed.* By PAUL PRY.

It is with very great pleasure I take up my pen to inform your correspondent W. B. page 21, the best method, I believe, yet practised of procuring double-flowering Stocks. Like him, I have been misled, and have entertained the erroneous opinion that seeds saved from plants growing near double kinds, would produce plants having double flowers, but such an idea is quite fallacious. It will be found on examining a double flower, that there is no pollen for the purpose of impregnation whereby to produce the effect stated.

The method I pursue is, to select from the single flowering plants those that have flowers with the greatest number of petals. In looking over a bed of Stocks, some plants are found having flowers with four petals; such I uniformly pull up as soon as I perceive them, and have them carried away some distance from the bed. Others I find with six petals to a flower, and some having even more than that number; such plants I retain, and from them I save my seeds, and I *never fail* to have a considerable propor-

N

tion of double-flowering plants. Last year, (1832) I had some of the purple Brompton Stocks raised from seeds saved upon the above plan, and from my whole stock, (50 plants) I had not one single flowering plant.

Stocks, in all their numerous and beautiful varieties, I very much admire, in consequence of which I feel a peculiar interest to recommend their culture to every lover of Flora; with this view I subjoin a few hints on the cultivation of this truly very beautiful and fragrant flower.

About the first week in May, I sow the Stock seeds very thinly, on a cool border, where I allow the plants to remain undisturbed till the beginning of July, when I put them out where they are to remain for flowering. It is an usual practice to prick out the plants on a nursery bed, and afterwards transplant them for flowering; but I find by such mode of treatment that they do not get fully established before winter, for the root being of the kind designated a tap-root, (i. e. carrot-shaped) it requires a considerable length of time to get properly rooted again.

Should the above observations meet your approbation, you will favour me by inserting them in the *Florist's Magazine*. I shall be most ready at all times to make known any little discoveries in Floriculture that I may be so fortunate as to make, for the benefit of others.*

Cambridge, April 15, 1833.

PAUL PRY.

* We shall consider ourselves amongst the individuals much benefitted, if our respected correspondent will thus keep his promise in mind.—CONDUCTOR.

PART II.

EXTRACTS.

Plants figured in the following Periodicals for May, 1833 :—

Curtis's Botanical Magazine, 3s. 6d. coloured, 3s. plain. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow.

1. *Erythina polidanthus*, naked flowering coral tree. Class, Diadelphia; order, Decandria; natural order, Leguminosæ. The individual plant from which the drawing and description were taken, grows in the garden of the Quinta da Valle, close to its rival in beauty; *Erythrina velutina*, see page 58. The present plant in Madeira grows about 20 feet high, with a trunk 4 feet in girth, and numerous subdivided erect branches, each tipped, from April to June,

with a spike of brilliant vermillion scarlet flowers. The species is a general inmate of the gardens in Madeira, to which it was probably brought from Portugal, where it is much cultivated: the native country of this splendid tree being Asia. Culture: cuttings very readily strike root; soil, rich light loam.—*Erythrina*, see page 58.

2. *Santalum albanum*, sandal wood; Tetrandria Monogynia, Santalacæ.—The *Santalum album*, or true Sandal wood, is, as is well known, one of the most fragrant of woods, and if, as some commentators suppose, it is the same with the *Almug* or *Algum* of Scripture (and this is the more probable as it was sent from Ophir); it was used in the time of Solomon, and in the building of the Temple. It is most extensively employed in making idols in India, and for incense at the altars of the Chinese deities. Grows abundantly in India, on the mountains of the Malabar coast.

3. *Dryandra armata*, sharp-pointed Dryandra, Pentandria Monogynia, Proteacæ. A much branching greenhouse shrub; branches flexuose, glabrous, clothed with a brown bark; leaves very deeply pinnatifid; flowers numerous, long, slender, yellow, deeply divided into four very narrow, linear laciniae. The flowers are uninteresting, but the foliage is handsome. Seeds of this plant were sent from New Holland to this country, and plants have been raised in the Glasgow Botanic Garden, which flowered in February, 1833. Culture: increased by cuttings or seeds; soil, sandy peat. *Dryandra*, after JONAS DRYANDER, a distinguished Botanist.

4. *Heteropteris chrysophylla*, golden leaved Chrysophylla; Decandria Trigynia, Malpighiaceæ. A twining shrub, attaining to a great length. Leaves, large, dark green on the upper side and a fine golden brown on the under side, which making so striking a contrast renders it a handsome plant. The flowers are orange-coloured, small. It is a desirable stove plant, a native of Brazil. Culture: increased by cuttings; soil, sandy loam. *Heteropteris*, from *Eteros*, various; and *pteros*, a wing: from the variable shape of the wing of the fruit.

5. *Pogostemon plectranthoides*, *Plectranthus* like; Didynamia Gymnospermia, Labiatæ. Seeds of this plant were received at the Royal Botanic Garden, Edinburgh, from the Mauritius, in 1830: it blossomed in the stove, for the first time, in January and February, 1833. Whatever it has of beauty, is derived from its long lilac bearded stamens; the corolla is white. *Pogostemon*, from *pogon*, a beard, and *stamon*, a stamen.

6. *Azalea ledifolia*, var. *phœnicea*, purple flowered. Fragrant Indian *Azalea*, Pentandria Monogynia, Rhododendreæ. The richly coloured flowers of this plant make a brilliant appearance in the greenhouse, and form a striking contrast with the white blossomed. The fragrance is similar to the white-flowered, or perhaps more powerful.—(See No. 1. *Flor. Cab.* page 8).—*Azalea*, from *Azaleus*, dry: arid, habitation suited to its native growth.

7. *Blechnum lanceola*, lance-shaped; Cryptogamia Filices. Nat. Ord. Filices, or Fern tribe of plants. This plant is a native of Brazil. It is cultivated in the stove of the Glasgow Botanic Garden. Culture: it is increased by parting the roots, and planting them in moist earth placed between two pieces of broken garden-pot, a practice we believe now very general in the cultivation of Ferns, and a very rational one, since such fragments retain the moisture longer than the soil itself, and thus imitate, as it were, the crevices of rocks, where this beautiful tribe of plants so much delights to grow.—*Blechnum*, from *Blechnon* or *Blachnon*, in Greek, from *bla*; powerless, insipid.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Esq.
Professor of Botany, in the London University. Coloured
4s., plain 3s.

1. *Benthāmia fragifera*, strawberry fruited; Tetrandria Monogynia, Cornææ. This valuable addition to our collection of hardy shrubs, was raised in the garden of J. H. Tremayne, Esq., at Heligan, Cornwall, from seeds received from his relation, Sir A. Buller, during his residence in the East Indies. It is

a very handsome evergreen, flowering in great profusion during summer, and producing abundance of large, globular, reddish fruit, the size of a moderate strawberry, in autumn. It flowered and fruited for the first time in Europe last year, in the rich collection of plants of Sir C. LEMON, Bart., M.P., of Carclew, in Cornwall, and under the very able management of Mr. W. B. BOOTH. Benthamia, in honour of GEO. BENTHAM, Esq.

2. *Duroia latifolia*, broad leaved, Polygamia Monœcia. Anacardiaceæ. A native of Chili. Like the other species described in page 58, it is about as hardy as a myrtle. A pretty phenomenon is exhibited by the leaves when thrown into water: after lying a short time, they will be found to start and jump as if they were alive, while at the instant of each start a jet of oily matter is discharged into the water. This circumstance appears to be owing to some peculiar irritability of the parenchyma of the leaves, which, when acted upon by water, causes the turpentine-sacs, that abound in the leaves, to empty themselves with violence; and the movement of the leaves may be ascribed to the recoil produced by the discharge.—Culture, &c. see page 36.

3. *Lupinus elegans*, drooping-leaved Lupine, Diadelphia Decandria. Leguminosæ. A very pretty annual Lupine, native of Mexico, whence seeds were sent to the London Horticultural Society, by Dr. DREPE, in 1881. It flowers in the open air, most abundantly. Of all the annual Lupines this is by far the handsomest; it even rivals the best of the perennial species. Flowers, dark violet and yellow at first, and afterwards rose coloured. Culture: increased by seeds; soil, rich loam. Lupinus, from lupus, a wolf; supposed to destroy the fertility of soil.

4. *Pimela sylvestris*, Forest Pimelea, Diandria Monogynia. Thymelææ. A hardy and pretty greenhouse shrub, a native of New Holland. It flowered in the fine collection of Mr. KNIGHT, in King's Road, last June. Flowers, corolla white, ends suffused with rose. Culture, &c., see page 60.

5. *Potentilla glandulosa*, Glandular; Icosandria, Polygynia. Rosacææ. A new hardy perennial species, from California, sent to the Horticultural Society. Blooms from July to September. Flowers, small yellow. Culture: increased by division of roots. Potentilla, from potens, powerful; supposed medicinal properties.

6. *Pultenæa roseamarginifolia*, Rosemary leaved, Decandria, Monogynia. Leguminosæ. It is a pretty new greenhouse shrub, from New Holland. Flowers, yellow, with a blood-coloured keel. Culture: easily increased by cuttings. Soil, sandy peat. Pultenæa, from Dr. RICHARD PULTENEY, a celebrated botanist.

7. *Oxalis Bowlei*, Bowle's Oxalis, Decandria Pentagynia. Oxalidææ. This most beautiful and florid plant is hardy, and will flower in the open ground in autumn; but blossoms profusely under glass, especially if, after a short period of rest at midsummer, it is placed in a stove or warm greenhouse for a very short time to make it start freely. Flowers, very fine rosy red, tube yellow. Culture: increased by offsets or seeds. Soil, sandy loam. Oxalis, from oxis, sharp, or sour, qualities of plant.

8. *Amygdalis Persica*, ALBA, the White Peach, Icosandria, Monogynia. Amygdalææ. The White Peach is a hardy ornamental shrub, with the habit of an Almond. It flowers in May. Its fruit has little merit. Amygdalis, from amygos, to lacerate; fissured shell, or fruit stone.

The Botanical Cabinet, 6s., ten plates, coloured; 2s. 6d. partly coloured. Edited by Messrs. LODDIGES's.

1. *Justicia callitricha*, Diandria, Monogynia. Acanthaceæ. From Brazil, in 1826, to the Liverpool Botanic Garden. It is a stove plant, blooming in winter, and is then very ornamental. Flowers, sulphur yellow. Culture: increased freely by cuttings; soil, rich loam. Justicia, (see page 62).

2. *Jasminum Sambac*, PLENO. Diandria, Monogynia. Jasmineæ. This is a native of India, where it is much cultivated for the delicious fragrance

of its pure white flowers. It requires a stove heat. Culture: increased by cuttings; soil, rich loam. Jasminium, from Ysmyr, the Arabic name.

3. *Zygopetalum stenochilum*, Gynandria Diandria. Orchideæ. This very fine plant was received by Messrs. LODDIGES's, in 1828, from Mr. WARRE, who sent it from Brazil. The blossoms are very beautiful. A flower comprising the following colours:—Green, Red, Blue, Yellow, and White. It also continues long in bloom. Culture: it thrives in the stove, potted in vegetable earth, intermixed with broken pieces of pots. Increased by offsets. Zygopetalum, from Zygos, yoke; petalon, petal; joined at the base.

4. *Maránta bicolor*, MINOR. Monandria, Monogynia. A native of South America; a neat little stove plant six inches high; leaves, richly and beautifully tinted; flowers, white, small. Culture: rich loam, increased by separate roots. Maranta, from B. MARANT, a Venetian Physician.

5. *Epacris campanulata*, bell shaped. Pentandria, Monogynia. Epacrideæ. Messrs. LODDIGES's, raised this elegant greenhouse plant from New Holland seeds, in 1830. It flowered in February and March 1833. It yields not in beauty to any of this fine genus of plants. Culture: it will increase by cuttings; soil, sandy peat. Epacris, from Epi, upon; akros, the top of; habitation.

6. *Primula sinensis*, ALBA. Pentandria Monogynia. Primulaceæ. A variety raised from seeds of *Primula sinensis*. It is very showy. Culture: it is readily raised from seeds; soil, rich and light. Primula, from primus, the first; time of flowering.

7. *Daphne odora* Octandria, Monogynia. Thymeleæ. A native of China; deserves a place in every greenhouse; flowers, white, very fragrant. Culture: increased by cuttings; soil, loam and peat. Daphne, from Daio, to burn; phone, noise; crackles when burning.

8. *Acácia dealbata*, Polygamia, Monæcio. Phyllodineæ. A native of New Holland; the flowers are fragrant, yellow; the foliage and splendid flowers is exceedingly ornamental. It makes a fine Conservatory plant. Culture: increased by seeds or cuttings; soil, loam and peat. Acacia, from Akazo, to sharpen; many species thorny.

9. *Wrightia pubescens*, Pentandria, Monogynia, Apocynæ. A native of India Islands, and also of the tropical parts of New Holland. It is a small shrub, flowers in February and March; colour, greenish yellow. Culture: increased by cuttings or layers; soil, loam and peat. Wrightia, from Dr. W. WRIGHT, a Scotch Physician.

10. *Acrotiche ovalifolia*, Pentandria, Monogynia. Polypodiaceæ. A native of New Holland, lately introduced, a very low greenhouse shrub, only growing a few inches high, flowers very small, coming in February and March; colour, greenish yellow. Culture: increased by cuttings; soil, sandy peat. Acrotiche, from Akros, a point, thix, hair; corolla.

Sweet's British Flower Garden, coloured, 9s., plain, 2s. 3d.

Edited by D. DON, Esq., Librarian to the Linnean Society.

1. *Iris reticulata*, netted flowered. Triandria, Monogynia. Irideæ. This plant was originally discovered in Georgia, by M. ADAMS, in 1821. It is a very rare and pretty species—in no collection, it is stated, but of Messrs. WHITLEY, BRAMES, and MILNE, Fulham Nurseries. Flowers, solitary, violet purple, with deeper coloured veins. The plant requires a light rich soil, and frame protection in winter; increased by offsets. Iris, from Iris the eye; the variety and brilliancy of its colours.

2. *Helleborus lividus*, three leaved. Polyandria, Polyginia. Ranunculaceæ. Introduced in 1710—but still rare. Flowers, greenish white; blooms in February—requires protection in winter. Helleborus, from Helein, to cause death; bora, food; poisonous.

3. *Hermione aperticorona*, spreading orange crowned. Hexandria, Monogynia. Amaryllideæ—Sub-order, Narcissineæ. This beautiful species comes into flower very soon after the more common *H. cupularis*, (the Soleil D'or of the Gardens,) and is more elegant and graceful. The flowers appear in the middle of April, in well grown plants there are about six flowers to an umbel, and their segments are often semi-reflexed, of a broad oval form, and much

imbricated; of a rich yellow colour, often shorter than their tube. The crown is ample and saucer shaped, of a bright orange colour.

4. *Loasa alba*, white-flowered Loasa. Polyandria, Monogynia. Loasææ. This pretty species of Loasa was introduced last year from seeds collected in Chile, by Mr. CUMING, and bloomed in the collection of plants at Sir GEORGE STAUNTON, Bart. Leigh Park, Hants, in June last. The flowers are, five outer large petals, white, the inner five very small, red. It continues in flower for several months in the open border. The plant is annual, and increased easily by seeds.

REFERENCE TO PLATES.

1. *Veronica Beccabunga*, Brooklime, or Short-leaved Water Speedwell. Diandria, Monogynia, Scrophularinæ. Clusters of flowers lateral, opposite. Leaves elliptical, flat, somewhat serrate, smooth, stem creeping. The whole plant succulent, glossy, stems generally floating. A native of Britain; grows in brooks, and in ditches with running water: commonly the companion of water cresses. Perennial; flowers blue: blooming from June to August. Veronica, see page 69.

2. *Centranthus ruber*, (Valeriana rubra) red. Monandria, Monogynia, Valerianæ. Leaves lance-shaped, nearly entire; grows from one to two feet high. Flowers rosy red, numerous, arranged in a corymbose head. Perennial; blooms from June to September. Grows on old walls, and among rubbish. Very frequent in Kent, Devon, and Cornwall. Centranthus, from kentron, a spur, anthos, a flower.

3. *Sparaxis tricolor*, three coloured. Triandria, Monogynia, Iridææ. This plant is a native of the Cape of Good Hope, introduced into this country in 1789. Its flowers are most splendid in their vividly contrasted colours, and it is a great ornament of the Greenhouse, flowering in May and June; grows one foot high; or it may be kept very well in a border close to the front of a stove, without any other protection. It increases by offsets from the bulbs, or by seeds, which are often produced. It thrives freely in a sandy peat soil. Sparaxis, from sparasso, to tear; lacerated spathes. To be obtained of Messrs. LODDIGES.

4. *Calceolaria Wheeleri*, Wheeler's hybrid Slipperwort. Diandria, Monogynia, Scrophularinæ. A perennial herbaceous plant. It is a double hybrid, raised from the seed of a hybrid that was produced from *Calceolaria purpurea*, fertilized with *Calceolaria corymbosa*, this was again fertilized by *Calceolaria purpurea*. It was raised by Mr. WHEELER, Nurseryman, at Warminster; of whom it may be obtained; also several other new and splendid seedlings. The present plant is a very free bloomer, flowering from May to September. Like all the other herbaceous species and varieties, it will flourish very freely, and make a fine appearance, growing from 1 to 2 feet high. A rich and sandy soil suits its growth. It is readily increased by parting, and requires winter protection in a frame or greenhouse. *Calceolaria*, from Calceolus, a slipper, form of corolla.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES, REMARKS, &c.

I have received the first two Numbers of your *Floricultural Cabinet*, and it has my cordial approbation and best wishes for its success. I think it very cheap, even with one plate, and I shall be very happy to contribute to its pages. And now I am writing, permit me to say I have received some excellent Tallies, of a wedge shape, 9 inches long, bevelled at top 2 inches by $1\frac{1}{2}$ inch, so that the name or number meets the eye directly. They are made of stone potter's ware, by WATTS & DOLTON, High-street, Lambeth, 18s. per

gross. They are admirably adapted for Georginas, Roses, &c., or any plants that grow in the open ground. The bevel part may be planted, and receive a number or name at pleasure. They will never decay, and rarely break. They may be made any size to order. If your correspondent, T. J. RISBY, would favour me with his address, I would answer his Query.

Wallingford.

JOS. TYSO.

I think Mr. T. RISBY's better plan would be,—and it is advice which experience has enabled me to give,—before he purchases any of the florist's flowers he mentions in No. II., p. 47, of your *Florist's Magazine*, to see them first in bloom, and choose for himself. By this means he will please his eye, and accommodate the prices to his pocket. He should at all events be informed that it is not always a criterion of the excellence, that a high price is asked for a new or scarce plant. Florists are not more honest than other men, and I am sorry to say that it is by no means an uncommon occurrence to get a very different plant for the one ordered, or a run flower in the place of a perfect one. To guard against these occurrences, I should recommend him to go to the gardens of the following highly respectable florists, with whom, if a mistake does happen, it is really a mistake, and not a designed deception. He will pay a little higher than at some other florists I could mention, but he will have the satisfaction of knowing that the flower he purchases is true to its name. For *Auriculas*, to HOGG, of Paddington; and GROOM, of Walworth. For *Carnations*, *Picotees*, and *Pinks*, to HOGG, who has by far the finest collection near London; DAVEY, of Chelsea; and GROOM. For *Ranunculuses*, to the Rev. JOSEPH TYSO, of Wallingford; and GROOM. For *Tulips*, to GROOM, and DAVEY. For *Dahlias*, to DENNIS, Chelsea. For *Hyacinths*, *Narcissuses*, &c., to CHARLWOOD, Covent garden; NOBLE, Fleet street; and FLANAGAN & Co., Mansion-house-street. *Polyanthuses* he will meet with in his travels to the above places. Should, however, Mr. RISBY live in the country, he will do well to get the catalogues of the above florists, and he will there see the flowers classed in a way that will give him a sufficient idea of the colours, &c. For I think it would not be fair to your other subscribers to occupy your pages with the names and descriptions of 168 flowers, and after all it would be useless; as perhaps Mr. RISBY would shudder at the idea of giving 200 or 300 guineas for the above 168 flowers; as a catalogue of the *best* flowers, amounting to that sum, or more, might easily be made. I should further recommend him HOGG and MAIN's works on the management of the flowers he wishes to grow.

SNOWDROP.

P.S.—I like No. II. very much; your lists are very good and valuable.
April 8th, 1833.

NOTE.—We did not perceive the error of the *Pinguicula* being named wrong, till a remedy was too late for that month. The reception of the remarks of our correspondent caused us to delay till we inserted them. The florists' flowers will be given—(see Cover of our last Number).—COND.

QUERY.—I was much pleased to see in the first and second Number of the *Floricultural Cabinet*, several of your readers make enquiry for a knowledge of the treatment and culture of flowers, and more so with the readiness of those who are in possession of superior knowledge in those tactics to come forward and make known, through your pages, the result of experience so valuable to many of your readers; but with none have I been pleased so much as that on the treatment of the *Ranunculus*, by Mr. CARR; there are few growers of that beautiful flower but will be pleased with the remarks of your correspondent. I hope he, or some of your readers, will be able to give me the information I desire on the treatment of the Tulip. I have now two beds in my garden, only a narrow walk between them: one bed, very good, or named sorts, is cankered, and the foliage quite withered, with scarcely a bloom upon it; the bed next to it is mixtures, or common varieties, and looking very well. I had a most beautiful bloom on the same beds last year, with the same treatment that I have practised this year. I have examined some of the decayed parts, and found an innumerable quantity of small wire-worms closely adhered to the cankered part of the foliage. An old grower, with whom I am acquainted, says, he believes good sorts are more subject to disease than common varieties

are. I trust some of your correspondents will attend to the hint of the old grower above-mentioned, and state if they believe such to be the case, and make it known through your pages, with the treatment and culture the Tulip require.

TULIPA.

QUERY.—You would particularly oblige one of your readers if you would communicate any information concerning the cultivation of that beautiful plant the "*Gentiana ácaulis*," or "*Gentianella*," as owing either to some peculiarity of soil, or treatment, it never yet has flowered in profusion with your

CONSTANT READER.

QUERY.—Can you, or any of your readers or correspondents, inform me of whom I can obtain the best varieties of Auriculas, and at a moderate cost.

PAUL PRY.

Before I proceed to my subject, allow me to premise that I am not vain enough to suppose I can instruct men whose business it is to cultivate the vegetable kingdom, and who have all the necessary apparatus at hand to assist them in propagation, forcing, &c.; my view is simply to communicate, through your pages, to such of your readers who, like myself, are obliged to resort to many contrivances to supply their deficiency in such respects, the result of my practice and observation. I now beg to observe to your correspondent DAFFODIL, that my reason for recommending stock plants to have a portion of the tubers of last year's formation attached, was to avoid the contingency he mentions, being fully aware that plants raised by cuttings are by no means unfrequently blind, a circumstance which has never occurred to me with plants of the former description. He misunderstood me when he supposed that I recommended cutting the Dahlia shoot in two. As the suffering them to grow sufficiently large for that purpose would only retard the backward eyes in growth, and much time would be lost, I merely stated the circumstance to prove that they rooted sooner when the fibres were slightly hardened, against a common opinion that they cannot be taken too young. The truth is, I have pursuits infinitely more important to me than Floriculture, and the shoots frequently overgrow me, in which case I resort to dividing them. Take them off by all means when three joints at most have attained any length, as near the crown as possible, (near which several joints are always crowded together as it were in one knot,) avoiding cutting so low as to injure the numerous eyes, which, if propagation be the object, must defeat it. My practice is to cut as long as the shoots rise freely, and when the parent roots shew signs of exhaustion, to divide, taking care to preserve a portion of newly formed fibre to each if possible; putting them into small pots, at least 60's or 48's, for the convenience of winter stowage, in a compost three parts of which is rotten dung, which I consider necessary for potted plants, being careful to cover the old crown well, otherwise they become so callous by exposure, that the eyes do not appear to have strength to burst the wrinkled bark, or cuticle, the following spring.

VERTUMNUS.

London, May 5th, 1833.

P.S.—When the cuttings have a pair of leaves at the extremity, I do not dress them off; as no benefit arises from such a practice, and as they essentially serve to protect the buds at their insertion.

MONTHLY FLORICULTURAL CALENDAR.

ANNUALS, see pages 43, 72.

AURICULAS may now be potted in a compost of two parts of good loamy soil, with river sand, one of peat soil and old ants' nests, and one of well-rotted cow-dung, two years old, see page 47.

CARNATIONS should be top-dressed, by removing an inch deep of the old soil, and replacing it with some very rich, see page 53.

CHRYSANTHEMUMS (Indian): Cuttings or offsets may now be struck in heat, or otherwise under a hand-glass, see pages 73, 74, and 81.

DAHLIAS, see pages 3, 22, 66, 95.

TULIPS, see page 24.

RIDGE, PRINTER, SHEFFIELD.





Oxalis Bôwiei.



Lupinus elegans.



Sálvia pratensis.



Iris pseudácorus.

THE
FLORICULTURAL CABINET,

JULY 1st, 1833.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of Hyacinths.* By
SNOWDROP.

It is generally supposed that Hyacinths will not bloom a second year in any degree equal to the first, after importation, and that they yearly deteriorate. This complaint is raised by those who have never tried a feasible method of culture. It is true that the bulbs are very much weakened by flowering in water, but with proper attention they may be recovered, and even made to equal those which are imported from Holland. It may, perhaps, be considered presumption in me to make any remarks on the cultivation of these flowers, when I confess that it is but the third year that I have grown them; but I cannot refrain from stating the success I have experienced from the following method of culture, more especially as Mr. PRICE, in your last number, solicits information on this point. The experiment was tried on some bulbs which had bloomed the previous Spring in water, and on a quantity of offsets. The former, though much weakened, threw out ten or a dozen bells each the first year, and from the latter, some of which were not larger than hazel nuts, I had the first Spring from three to ten bells according to size; in fact every one bloomed. In the present Spring they are really fine flowers. My method was this. In October I prepared the bed, taking out the earth to the depth of two feet, and filling up with a mixture of one half

sandy loam and one half inch rotten dung, well incorporated, to which I added a handful of salt. In ten days, when the bed had settled, I planted the bulbs five inches deep. About the beginning of December I top-dressed with a coating of three inches thick of good strong dung. The result of this method more than answered my expectations. The bulbs were left in the earth, and this year they have been proportionably fine. I was led to adopt this mode of treatment by the success which attended a single experiment. I planted a wasted old bulb, of a double white variety, about five inches deep in common garden soil; in the following Spring it threw out four bells. I left it in the ground during the winter, merely laying some dung over it for protection from frost; in the second spring it threw out fourteen fine bells. I consider that the bulbs should not be removed oftener than once in four years. A friend of mine has this year some very fine bloom from bulbs which he has had fifteen years, and which are equal to most of the best bulbs imported; but in two or three instances they surpass any I ever beheld. I am decidedly of opinion, and experience bears me out, that bulbous flowers which are required to bloom well, should *never* be allowed to perfect their seed, but as soon as possible after the flower decays it should be nipped off close to the stem, but no part of the stem itself.

Chelsea, May 3, 1833.

SNOWDROP.

ARTICLE II.—*On the Culture of Butterwort and other Bog Plants.* By Mr. O. JEWITT.

I am induced, from your having inserted a figure of the *Pinguicula vulgaris* in your last number, to send you a few observations on its cultivation, as well as that of several other bog-plants which are found in the same localities, and hope they may be found interesting to some of your botanical readers.

I have grown these plants two or three years, and the place I would recommend is the following:—Procure a stone trough of any convenient size, but not less than five or six inches deep; there should be a tap or something of the kind in one corner, for letting off the water if necessary. Fill the trough for about three inches in depth with broken stones, &c. so as to let the water

drain freely through ; over this lay a compost of peat and light loam chopped together ; the surface should then be covered with moss ; the white bog-moss (*Sphágnum*) answers the best, but if that cannot be procured, some of the common feather-mosses (*Hyperum*) will serve, and the plants inserted, taking care to keep a little moss about each of them in order to retain the moisture. The tap should then be closed, and water gently poured in till it rises above the surface of the soil. The best time for planting is March or April ; the plants will have taken to the soil in a day or two, and will flower vigorously in May and June following.

In hot weather it will be necessary to keep the water even with, or a little above, the surface of the soil, as the leaves are apt to shrivel ; but in long-continued rains the tap should be left open, so as to allow all the wet to drain off, to prevent the rotting of the roots. This should likewise be done throughout the winter. The trough should be so placed as to receive as much sun as possible.

The Butterwort grows in bogs in many parts of England, and is found within a few miles of Sheffield, near Ringing Lowe, and various other parts of the East Moor ; it is also found plentifully opposite the Pig Tor, in the dale through which the Wye runs between Taddington and Buxton. If the seeds be gathered and sown in the artificial bog before-mentioned, they will soon germinate, and produce flowering plants the next season. The cotyledon or seed-leaf of the Butterwort (which is solitary) is very small, but is an interesting object in the microscope, the whole surface being covered with minute transparent globules of a clear liquid, as shewn in the engraving.



There are several other British bog-plants which are in general found in the same situations as the Butterwort, and which thrive equally well with the same treatment, among which may be mentioned the following :—Lancashire Asphodel, *Narthécium ossifragum* ; Cranberry, *Oxycoccus vulgaris* ; Cotton-grass, *Eriophorum*

angustifolium, &c.; Marsh Pennywort, *Hydrocótyle vulgaris*; Crowberry, *Empétum nigrum*, (this is in general found at the edges of the bogs;) Sundew, *Drósera rotundifólia*, &c., this curious and interesting little plant does not thrive well planted in the soil, it requires the white bog-moss above-mentioned—the whole of these are found on the East Moor; Grass of Parnassus, *Parnássia palústris*, a beautiful plant found on Masson, Matlock Bath, and on many other hills in the Peak. Many of the Orchises flourish well under this treatment, and by planting a variety of them, a succession of these beautiful and interesting flowers may be kept up for some months.

The American Cranberry, *Oxycóccus macrocárus*, fruits well under this cultivation, and the *Sisirynchium ánceps* flowers far more beautifully and continues longer in flower than when on the bed. Many other plants might be enumerated as suitable, but they will occur to your readers. All plants which grow naturally in boggy or marshy situations may, I think, be successfully grown in this manner.

Perhaps your readers may think this minature garden not worth notice, but I can assure such of them as are inclined to take the trouble, and are fond of botanical pursuits, that they will find themselves amply repaid by having it in their power to cultivate some of the most beautiful, curious, and least known of British and Foreign plants. It is likewise particularly well adapted to residents in a town, as a few square feet of space on a roof, a balcony, or any such situation, is quite sufficient for the purpose, and the trouble and care required is trifling.

Duffield Bank, April 5, 1833.

O. JEWITT.

ARTICLE III.—*On the Culture of the Calceolària bicolor.* By Mr. T. K. SHORT.

This most splendid *Calceolaria* is by far the best of the shrubby class of these plants, and if properly treated, when in full bloom, has a most imposing appearance. By the mode of treatment I pursue with it, one small plant will cover in a season 15 square feet of trellis, and produce spikes of flowers 14 inches long. My method is as follows:—In March, I take off cuttings from the

young wood, cutting them at the fourth joint from the top of each shoot; I insert them in sand, cover them with a bell glass, and place them in a hot-bed frame. In about ten or fourteen days, I find them sufficiently rooted for transplanting into very small sized pots, well drained with broken pieces of pot, upon which is a layer of Sphagnum or bog moss. The soil I use is light and rich, and the Sphagnum not only acts as drainage, but also keeps the light soil together when the plants are re-potted, and prevents the roots being damaged. When the roots have filled the pots, I successively remove the plants into larger. This is very soon required, as this class of Calceolarias produce an amazing quantity of roots in a very short time. When the plants have reached the glass of the frame lights, I remove them to a Greenhouse; early in August I turn them out into a deep pit at the back of the Greenhouse, where they become one mass of flowers. I have (April 16th) plants with 18 spikes each, which on an average contain 60 or 70 flowers. I frequently use in watering the drainings from a dunghill. If the above remarks are considered worthy of insertion in your delightful flower Magazine, I shall be glad to see them inserted, and beg to assure you I shall have much pleasure in sending you other remarks on Floriculture from time to time.

Marten Hall, April 16, 1833.

T. K. SHORT.

ARTICLE IV.—*On the Cultivation of the Pink.* By
Mr. JOHN REVELL, Florist, Sheffield.

The Pink is a much more hardy plant than the Carnation, and less liable to the casualties incident to the latter. The best method of cultivating the Pink that has ever come under my observation or practice, is in the following manner:—

The compost of the beds should be composed of fresh loamy soil, mixed with an equal proportion of cow dung, which should be two years old. These materials must be well incorporated together by frequent digging. The beds in which blooming plants are to be grown, should be some little higher than the surrounding surface,

and the surface of the bed must be formed so as to have it convex, in order to throw off any excess of wet, which if not guarded against would be particularly injurious.

I plant off my Pinks from blooming in September, for, as is very properly remarked by Mr. Hogg, in his excellent Treatise on Florist Flowers, Pinks transplanted in spring never do well, nor shew half the beauty which those do that are planted in September; the laced Pinks in particular, appear almost plain, without their distinguishing character. In order to have strong vigorous blossoms, I raise fresh plants from pipings every season, as they bloom the best when one year old.

I have often noticed in the plan of striking pipings which is generally adopted, a very great failure to attend the practice; in numerous cases not more than one in twenty strike root; the usual method is to make a slight hot-bed, and cover it either with a frame or hand glass; the pipings being inserted are accommodated with dung bed heat, this is quite opposed to their striking, for at this period it is indispensibly necessary to a successful striking that they be quite cold. In the mode I practice, ninety-nine will usually strike out of every hundred.

My piping season is from the middle of June, to the first of July, "that is when the plants are in bloom," for if later, they shoots get too long for successfully striking root. I find it best to take them off when about two inches long, and plants raised from such pipings, make a far more vigorous growth than those which are struck from older pipings. The mode I pursue in striking is as follows. I select a shady situation in the garden; having dug the soil over, I then with water make it a complete puddle. Having taken off the pipings, I strip off the two lowest leaves, and then stick the pipings into the puddle, at about three inches apart. Having done this, I place a hand glass over them; I do not water them on insertion, for if done, the pipings would be very liable to damp off. The hand glass is not removed till I perceive the pipings have begun to push shoots; this is generally in about three weeks; I then take it off for about half an hour each day for the first week, thus gradually exposing them to the air. By the above mode of striking, for the last four years I have not lost one dozen of pipings.

In order to grow Pinks, producing the finest and best flowers, it

is indispensable to make a new bed every year. I uniformly grow the most esteemed varieties in beds prepared as above, where

“ Varied beauties shine upon her face ;
Where all is beauty, harmony, and grace.”

The properties of a good Pink are, the flower must be two inches or upwards across, broad petals, of a pure white, quite distinct from the eye, unless the flower be a laced Pink, in which the colour of the eye must go round the edge of the petals, and be free from any tinge or spot; the colour of the eye and edge should consist of a bright, or dark rich crimson, resembling velvet, the darker the colour, the more to be valued.

When the weather is hot, I find it necessary to shade the flowers, this is done by placing small boards over them, the boards are five inches broad, and about half an inch thick, each fixed upon a stick that supports it above the flowers—for

“ Touch’d by the sun, the lustre fades
And weeps itself away.”

Early in May, I commence watering with liquid manure, as stated in page 53 of the May Number.

June 3d, 1833.

JOHN REVELL.

ARTICLE V.—*On Raising Double-flowering Stocks from Seeds.* By Mr. W. STENT, East Stockwith, near Gainsborough.

I have great pleasure in being a subscriber to your very interesting publication, *The Floricultural Cabinet*. In perusing your Number for March, I find one of your friends inquiring what method he is to take to procure double seed from the single Stock, and he wonders how the double flowers of the Stock affect the single. I answer, that the Double do not affect the Single at all; that it is the pollen in flowers that impregnate one another. Now if your friend will examine the Double Stock, he will find no such thing as stamens or anthers, consequently no pollen; therefore, they cannot affect single blossoms. I beg the liberty to inform your friend, the method I take to secure good seed. When my Stocks are in flower I look them over, and all flowers on the single

plants that have five, six, or seven petals, I mark them by tying a piece of coloured worsted to the foot stalk of the flower. When the seed is ripe, I preserve the pods thus marked, by themselves ; the seed in those pods produce me about 8 out of 10 double flowers the ensuing year.

May 6th, 1833.

WILLIAM STENT.

P.S.—There is one thing I have always thought would be an improvement to a Work like your's, that is, when you describe a new plant, if you were to mention where *it* is to be *got*, and the *price*. If my humble talents can in any way promote the interest of your Work, in future it is at your entire service.*

* The favour of our respected Correspondent will very highly oblige us.—
CON.

ARTICLE VI.—*On Changing the Colour of the Flowers of the Hydrangea hortensis.* By MR. J. MARSDEN.

Observing in the 1st No. of the *Floricultural Cabinet*, a query from "RICHARD TAIT," and not finding any reply in your second number, I beg to state that the Hydrangea—rose flowering—may be made to produce beautiful blue clusters of flowers, often larger than when grown in common earth, by planting healthy plants in pots filled with good *bog* earth, in the autumn or early in the spring ; putting the roots in, quite clean and free from the soil they were grown in when flowering rose-coloured blossoms. I believe that if a small portion of night soil is added to the bog, and before using, seeing that it is well decomposed and mixed with it ; it is more certain of producing fine heads of blue blossoms ; but bog alone seldom fails to have the desired effect. My late father had a large quantity of Blue Hydrangeas, which I believe were produced solely from using bog, and I believe he had a method of growing them, to produce yellow blossoms by using strong sulphur water, or some other chemical process. This however, I am unable to state. I am happy to add, the *Floricultural Cabinet* is much approved of in this town and neighbourhood, and will undoubtedly have a wide circulation when it becomes better known.

Chelmsford, April 17, 1833.

JAMES MARSDEN.

ARTICLE VII.—*On the Culture of Balsams.* By SNOW-DROP.

Your Correspondent ST. PATRICK has said enough on the cultivation of this flower, to deter any one, who has not "all appliances and means to boot," from meddling with it. Should it have this effect on any of the votaries of *Flora*, I can give them some comfort in the assurance that they may raise Balsams by simpler means than those which he has detailed. Last year, I sowed the seed on a south border at the beginning of April, and protected it with a hand glass, (a flower pot would have done as well.) As soon as the plants were fit to transplant, I put some into the parterre, and others into a bed of good soil, and without any further care or pains, except occasionally watering, I had as fine plants, and as fine bloom, as any I have seen produced by other and more troublesome methods.

May 3rd.

SNOWDROP.

ARTICLE VIII.—*On Flowering the Amaryllis vittata.* By EBOR.

My experience has taught me that the bulbs of this species of *Amaryllis* will not flower freely before they have attained the size of nearly two inches in diameter; and not to be disappointed in flowering bulbs of this size, an early growth in the Spring and an early decay in Summer are two necessary requisites. The growth of the plant for some time after the flowering is over, is encouraged, in order to ripen the bulb to perfection; on this depends, in a great measure, its certainty of flowering the following season.

I February, I shake off the earth from the roots and plant each bulb in a pot suited to its size; the soil I use is a very rich sandy loam. I do not cover the bulbs, but place them about one half their depth in the soil. I water them and then place them in a warm situation, on the flue in a forcing stove. When they begin to grow, I put each pot into a feeder filled with sand, and keep them well supplied with water. When done flowering, the water is gradually lessened, until the foliage begins to decay. The pot is

P

then turned on its side, and kept in any cool situation, free from frost, until the time of planting.

This species of *Amaryllis* seldom puts out offsets, but it generally perfects plenty of seeds. This I find it may be allowed to do, as it does not injure the bulb to prevent its flowering the next season. The seeds are sown when ripe in pots filled with sandy loam, and placed in a hotbed; when up, strong enough to bear the Hot-house, they are removed there. I allow them to remain in the seed pot for the first season. When the foliage is decayed, I plant each bulb in a separate pot, and afterwards successively re-pot them, until they have attained a suitable size for flowering, when they are treated as above described, under which treatment they bloom very strong and freely.

Feb. 8, 1833.

EBOR.

PART II.

EXTRACTS.

Plants figured in the following Periodicals for June, 1833:—

Curtis's Botanical Magazine, 3s. 6d. coloured, 3s. plain. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow.

1. *Cynara Cardunculus*, common cardoon; Syngenesia Polygamia Equalis. Compositæ. The plant is a native of the north of Africa, yet it bears our climate remarkably well, and independent of its uses for domestic purposes, it really makes a fine appearance in a large garden, or in a shrubbery when in bloom—colour, blue: *Cynara*, from Kyon, dog; spines of the involucreum being like dog's teeth.

2. *Corydalis bracteata*, Diadelphia Hexandria. Fumariacæ. A native of the Altaia Mountains; grown in the Birmingham Botanic Gardens, flowers in March—colour, pale yellow. It has much the same appearance as some of the yellow flowering *Fumarias*; grows six inches high, and requires winter protection in a cool frame. *Corydalis*: from *Korydalis*, ancient Greek name for *Fumitory*.

3. *Epacris ceræiflora*. Wax flowered *Epacris*; Pentandria Monogynia. Epacridæ. This species is a native of Van Dieman's Land; was raised at the Edinburgh Botanic Garden, from seeds sent by Mr. Newbigging, and likewise by the Rev. E. Craig, in January, 1831. It flowered, for the first time, in April and May; the flowers are white. It is a very free flowering plant. Culture: increased by slips or cuttings inserted in sand; soil, sandy peat, having the pots well drained with broken pots. *Epacris*, from *Epi*, upon, *akros*, the top; natural habitation.

4. *Acacia decipiens*, var. *præmorsa*, Paradoxical *Acacia* variety. Polygamia Monœcia; Leguminosæ. A free flowering greenhouse plant, with pretty yellow

blossoms; cultivated in Mr. Knight's Nursery, King's Road, Chelsea. It appears to be a variety of *A. decipiens*; having paler flowers, and the petals more reflexed. Culture: increased by cuttings struck in sand and peat; soil: sandy peat and loam equal proportions. *Acacia*, from Akazo, to sharpen; many species being very thorny.

5. *Leontice Alatica*; *Hexandria Monogynia*. *Berberidæ*. This very pretty plant flowered very freely in a cold frame in April. It is a native of the western part of the Altai Mountains; flowers yellow; plants grow six inches high. Culture: parted at the roots; soil, sandy loam and peat. *Leontice*, from *Leontos*; the fancied resemblance in the leaves to the print of a lion's foot.

6. *Arabis rosea*, rose coloured rock cress. *Tetradynamia Siliquosa*. *Cruciferae*. This plant probably flowered for the first time in this country, in February, 1833, in the garden of the Rev. Mr. Selwyn, of Kilmington, Wiltshire. It is a native of Calabria, and is best treated by keeping it under a cool frame, though it will perhaps prove quite hardy. The plant grows about a foot high, flowers large in proportion to the size of the plant, collected into a dense head; colour, of a beautiful deep rose. It is a pretty addition to the herbaceous border plants. Culture: increased by division of plant; soil, rich loam. *Arabis*, from the plant originally coming from Arabia.

7. *Pteris pedata*, Pedate-leaved Brake. *Cryptogamia Felices*. *Felices*. This plant was received from Jamaica into the Glasgow Botanic Garden. The bright green of the foliage, edged by the pale brown line of the involucre, and the glossy black purple stipulets render this Fern a desirable inmate in stove collections. Culture: increased by division of plant; soil, peat and loam. *Pteris*, from *Pteris*, a Fern in Greek, and that from *Pterun*, a plume, or feather.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Esq.,
Professor of Botany, in the London University. Coloured
4s., plain 3s.

1. *Ænothéra tenella*; var. *tenuifolia*, large purple Chilean Evening Primrose. A hardy annual of great beauty, flowering in July, August, and September; the plant grows about nine inches high. The collectors who went out to Chili and the Islands of the Pacific with Captain Beechy, returned in 1829; and Mr. Lambert, of Boyton House, procured from them, among other things, specimens of another Evening Primrose, the *Æ. tenuifolia* upon which ripe seeds were found. These being sown produced a plant, which is, as far as gardens are concerned, a very different plant from *Æ. tenella*. It differs from it in having longer and more channelled leaves, and much larger and far more showy flowers; for white in *Æ. tenella* the flowers are half hidden by the leaves; in *Æ. tenuifolia* the leaves can scarcely be discovered for the flowers. *Ænothéra*, from *Oinos*, wine; *thera*, a catching, acquired smell.

2. *Calceolaria rugosa*, sage leaved slipper wort. A native of Chile, introduced in 1824. In many respects it approaches *C. integrifolia*, but it is readily known by its deeper yellow flowers, its brown purplish branches slightly covered with wool on their youngest parts, by the coarser diverging serratures of its leaves; and as Dr. Hooker observes by the small upper lip of its corolla. It is a half-hardy plant, requiring a cool frame protection in winter and grown in borders in summer. *Calceolaria*, from *Calceolus*, a slipper, corolla.

3. *Amelanchier florida*, many flowered. *Ioosandria*; *Pentagynia*. *Pomaceæ*. A native of North West America, where it was found by Mr. Douglas; it forms a handsome shrub, in the way of snowy mespilus, flowering in May. Like that species, it is best propagated by layers. Flowers white. *Amelanchier*, from *Amelanchier*, Savoy name from Medlar.

4. *Calliprora lutea*, yellow pretty face. *Hexandria Monogynia*. *Asphodelæ*. Found in California and sent by Mr. Douglas. It proves to be a hardy handsome, bulbous plant, growing freely in a shaded peat border, and flower-

ing in July. Flowers, yellow. Culture: it is propagated by off-sets, which it produces freely. Caliprora, from Kalliporas, pretty face, in allusion to its beauty.

5. *Mimulus roseus*, rosy Monkey flower; *Didynamia Angiospermia*. Scrophularinæ. This beautiful species was sent by Mr. Douglas from Northern California in 1831. He says it is extremely rare, and the most striking object he met with in that country. It is found difficult to manage, for the plants that were kept in the open border during summer did not answer the expectations entertained them. It flowers in July and August, and will probably thrive much better in a greenhouse than the open air. Culture: the plants in the Garden of the London Horticultural Society have been potted in loam and leaf mould, and kept under glass. *Mimulus*, from Mimo, an ape; seeds like a face.

6. *Nicotiana persica*, Shiraz Tobacco; *Pentandria Monogynia*. Solanæ. It is rather a handsome annual, exhaling a faint but pleasant odour in the evening, at which time its flowers are in perfection. In Persia, it grows three or four feet high. Flowers: petals, white inside, green outside. Culture: it requires a dark, rich soil, and most abundant watering during all the season of heat. *Nicotiana*, named after JEAN NICOT, a French Ambassador in Portugal, who first brought tobacco to France, in 1560.

7. *Ænothera densiflora*; *Octandria Monogynia*. Onograriæ. A remarkable new species, of which seeds were sent by Mr. Douglas from Northern California in 1831; it flowered last year in the Garden of the Horticultural Society. It proves to be a hardy annual, producing seed in great abundance. Flowers: purple upper side of petals, lower, rose. *Ænothera*—see description above.

Loddiges's Botanical Cabinet, 5s. 6d. ten plates coloured; 2s. 6d. partly coloured. Edited by Messrs. LODDIGES'S.

1. *Epacris campanulata alba*, *Pentandria*, *Monogynia*. *Epacrideæ*. A native of New South Wales. It was raised from seeds in 1830, by Messrs. LODDIGES'S; colour, white; it requires the protection of an airy greenhouse, and may be propagated by cuttings; soil, sandy peat. *Epacris* from Epi, upon, akros, the top; habitation.

2. *Melastoma malabathrica*, *Decandria*, *Monogynia*. *Melastomaceæ*. From India in 1793; it requires a stove heat, and thrives best where air is admitted, especially in summer; colour, pink; culture, it is easily increased by cuttings; soil, loam and peat. *Melastoma* from Melas; black, stoma, mouth; berries stain.

3. *Prœkia cricis*, *Polyandria*, *Polygynia*. *Bixinæ*. A native of Havana; it was brought to the Horticultural Society in 1823, by Mr. J. Dox.—It requires constant stove heat; flowers, yellow; culture, increased by cuttings; soil, loam and peat.

4. *Pholidota imbricata*, *Gynandria*, *Monandria*. *Orchideæ*. A native of Nepal, where it grows upon trees; it is a stove plant, flowering from February to May; colour, brown and white; culture, increased by division of roots; soil, vegetable earth. *Pholidota*, from Pholis, a scale; flowers covered with a scale-like bractea.

5. *Dendrobium pulchellum*, *Gynandria*, *Monandria*. *Orchideæ*. This very fine species is a native of India, where it appears to grow upon trees; it thrives best in a small pot of moss, kept moist, and suspended from a rafter in the stove; colour, yellow, pink, and white. *Dendrobium*, from Dendron, tree; bio, to live; growing upon.

6. *Hypoxis ramosa*, *Hexandria*, *Monogynia*. *Hypoxidæ*. A native of the Cape of Good Hope; it flowers in June and July; the flowers are yellow. After flowering, the bulb remains dormant, sometimes for one or two years. It appears to be very slow of increase, not producing offsets. The soil should be sandy peat, and to be kept in the greenhouse. *Hypoxis*, from Hypo; beneath, oxis, sharp; base of capsule.

7. *Malpighia fucata*, Decandria, Trigynia. Malpighiaceæ. This is supposed to be a native of the West Indies. It grows erect to the height of three or four feet, and flowers at various seasons; flowers of a faint rose colour. The leaves are covered, especially underneath, with numerous stings, nearly half an inch long; when touched, they enter the skin and produce considerable irritation. Culture: it requires the protection of the stove, and may be propagated by cuttings. Malpighia, from M. MALPIGHI, Professor of Medicine at Bologna.

8. *Styphelia tubiflora*, Pentandria, Monogynia. Epacrideæ. This beautiful plant is a native of New South Wales. The flowers are produced in fine spikes, and are of a bright red. Culture: it thrives in the greenhouse, potted in sandy peat earth. It will increase by cuttings. Styphelia, from Styphelos, rigid; compact habit.

9. *Gesneria Douglassii*. Didynania, Angiospermia. Gesneriæ. This is a native of Rio Janeiro, where it was discovered in 1824 by Mr. DOUGLAS, after whom it is named. The flowers are orange, spotted with red. A very handsome flowering plant. It requires the stove protection, and flowers in Spring, continuing long in succession. It may be increased by dividing the root, which is tuberos, and should be potted in rich light earth. Gesneria, from CONRAD GESNER, of Zurich, the famous botanist.

10. *Kennedia longiracemosa*; Diadelphia, Decandria. Leguminosæ. A native of New Holland, first raised by Mr. Rollisson. It is a pretty climber, very like *K. monophylla*; flowers, rose-coloured. It requires the greenhouse and flowers in spring; may be increased by cuttings, and will thrive in peat earth and loam. Kennedia, after Mr. KENNEDY, late Nurseryman at Hammersmith, near London.

Sweet's British Flower Garden, coloured, 9s.; plain, 2s. 3d.

Edited by D. DON, Esq., Librarian to the Linnæan Society.

1. *Nierembergia phænicea*, purple Nierembergia; Pentandria Monogynia. Solanæ. Few plants of this family surpass this one, in the beauty and brilliancy of its fine bright rosy purple blossoms, rendering it one of the most valuable acquisitions that has been made to our collections of late years. It is a native of the countries of the Rio de la Plata, it was introduced in 1831. Culture: it will succeed very well in the open border, where it should be planted in light vegetable soil; it will continue to blossom from April to November; it will readily increase either by seeds or slips—plants raised from seeds produce the finer flowers, but from cuttings the plants bloom more profusely. It is a most desirable plant. It was first named *Salpiglossis integrifolia*, and latterly *Petunia integrifolia*, but now *Nierembergia phænicea*.—Messrs. YOUNG, of Epsom Nursery, possess an abundance of plants, at a low price, as also some others of the principal nurserymen. Nierembergia, after JOHN FUSEBIUS NIEREMBERG, a Spanish Jesuit.

2. *Crocus lacteus*, cream-coloured Crocus; Triandria Monogynia. Irideæ. A native of Mesia.

3. *Loasa nitida*, glossy leaved Loasa; Polyandria, Monogynia. Loasæ. A pretty hardy annual, native of Chile; raised from seeds by Sir GEO. STAUNTON, Bart. If planted in poor soil it blossoms abundantly, but in a rich one, it becomes luxuriant and unsightly.

4. *Nicotiana longiflora*, long-flowered Tobacco; Pentandria, Monogynia. Solanæ. This plant is a half-hardy annual, thriving best in light rich soil, and is increased by seeds; it is a native of Buenos Ayres, where it was discovered by Mr. TWEDDIE. Nicotiana, from JEAN NICOT, Envoy from the Court of France to Portugal, whence he brought the plant in 1560.

The Botanic Garden. Monthly, 1s. 6d. large; 1s. small, coloured
 Edited by Mr. B. MAUND.

1. *Dolichos lignosus*, woody dolichos; Diadelphia, Decandria. Leguminozæ; a native of the East Indies: perennial, introduced in 1776, grows eight feet high, flowers in July and August; colour, lilac. It may be raised from seeds, or struck from cuttings, and should have winter protection. Dolichos is a Greek word, signifying long: the length of the tall climbing stems of the plant. Lignosus, from the Latin lignum, wood: adopted to mark its woody stems.

2. *Rudbeckia pinnata*, pinnate rudbeckia; Syngenesia, Frustranea. Compositæ; a native of North America: hardy perennial, introduced in 1803, height four feet, flowers in August and September; colour, yellow. It may be divided in spring or autumn. Rudbeckia, from OLOF RUDBECK, Professor of Botany, at Upsel, died in 1702. Pinnata, from the Latin pinna, a wing; resemblance of the leaflets.

3. *Narcissus angustifolius*, narrow-leaved narcissus; Hexandria, Monogynia. Amaryllideæ; a native of S. Europe: perennial, cultivated in 1626, height one foot, flowers in April and May; colour, white. The bulbs increase abundantly. When parting is required, it should be performed in autumn. Narcissus, from Narke, stupor, effects of smell; angustifolius, narrow-leaved.

4. *Rhododendron catawbiense*, Catawba rhododendron; Decandria, Monogynia. Ericææ; a native of N. America: perennial, introduced in 1809, height three feet, flowers from June to August; colour, fine pink. It is propagated by layers. Rhodendron, in the Greek language, signifies rose tree; rhodon, a rose; dendron, a tree. Catawbiense, is derived from the name of the river Catawba, in North America, near which this species was discovered by Mr. Praser.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES, ANSWERS, REMARKS, &c.

We have at length, in the *Floricultural Cabinet*, a description of Work long called for by the public, and I doubt not if its present principles be strictly adhered to, that its patronage will continue to increase. No doubt you, like most other Editors of Periodicals, have been overwhelmed with *advice*, for there are few who have not vanity enough to think themselves competent to give it, and, perhaps, you may think, sufficiently eager to communicate it also. Pardon me, then, if I infringe a few minutes upon your time; and the grounds upon which I claim the privilege are two-fold—first, as an enthusiastic admirer of the Flower Garden, and cultivator (on a small scale) of what are termed Florists' (or Stage) flowers; and secondly, as a Bookseller, and consequently feeling our interests combined in its popularity.

Till the first appearance of the Horticultural Register, by yourself and Mr. Paxton, we had not a periodical strictly of this nature; for the Nobleman, Gentleman, or scientific Gardener, LONDON is every thing that can be wished; but there was something wanted less expensive and less scientific. The public hailed the appearance of the Horticultural Register to supply this, but it has turned out LONDON in miniature; several of our friends who commenced with it, discontinued it at Christmas, finding it contained too much on forcing, &c., in fact, treading too much on the heels of LONDON. The complaint was, we want something to direct our out door operations, more particularly on *floral matters*; your work has appeared, and we number already our half-score

subscribers; if the interest can be kept up, I doubt not of its abiding and increasing popularity.

The article on the Dahlia in No. 1, is of the true sort, and followed by another on the same subject by VERTUMNUS, in No. 2, still keep up the interest, and at the right period of time too. That on the Ranunculus in No. 2, is of the same cast, though rather late in time; these are the kind of articles for the growers of Florists' flowers, and if you can manage to obtain a store of good practical articles of the same description, on the different Stage flowers, and spin them out regularly as the work goes along, say one in each number, or more if your stock will afford it, it will form the grand incitement to purchasers; no matter if the same flower is treated upon by different hands, and of course on different systems, if but like something on true principles, and the nearer these can be given to the time of operation, the more acceptable; this department must be the key-stone of the fabric. Not less interesting to another class of readers, (and in most instances they are *distinct*.) are the articles on the Fuchsias, Azáleas, Salvia Africana, Lupinus mutabilis, Camellias, Coxcumb, Verbena Melindris, &c. &c.; the article on the use of Liquid Manure, is also a truly practical one. Pray ask next Christmas 12 months how many copies *each work* of the Magazines above cited publishes; your's is the Penny Magazine of its class, and must run the race of popularity.

In many respects I agree with your correspondent SNOWDROP, page 69. The title would be better simply "The Florist's Magazine;" it is more expressive. Your Reviews are useful, so are catalogues of Plants, &c. Returns of Florists' Meetings, and remarks upon them, are an indispensable feature.

But as to the cutting down the articles of your correspondents, as he recommends on the article Dahlia, No. 2, it is rather a ticklish affair, and liable to give offence; unless they are very prolix, they should be borne with; or if possible, be revised by the writer; we are all tender of our own progeny; like myself, he thinks the Florist flowers should be the key-stone.

Abby-de-la-Zouch, May 13, 1833.

J. D. H.

Having read some remarks on your Work by SNOWDROP, I could not pass over it in silence, and if you will insert these few lines in this month's number of your valuable work, you will much oblige me. In the first place I should like to know why SNOWDROP does not like your first title, "*Floricultural Cabinet*." I will ask SNOWDROP what a Cabinet is, I always understood it meant a repository, and is very appropriate. "The second title is very preferable, I hope you will confine it to the latter." I will ask SNOWDROP what difference it makes as to what title it is known by, for if it is changed for every like and dislike, it will want a new title every month. "If your correspondence is too luxuriant, you can easily apply the pruning knife." The pruning knife would have been very appropriate on the remarks of SNOWDROP.

"I hope you will confine the Magazine to its particular object, and not overwhelm us with plans of hot-houses, green-houses, &c. &c." The above remark is very good, after SNOWDROP (in a former number) has cried out for a *moveable awning* for a tulip bed. I would ask SNOWDROP if he would grow *some plants* in the open air, which would make him appear a much cleverer man than he now wishes to appear. I think it quite right to let us know of the most approved principles of erecting those structures before we begin to build. With respect to the plates I think it the most ridiculous remark I ever heard, for if SNOWDROP was to publish a work and insert plates value one shilling, and sell it at sixpence, he would not increase his income by it. I think the plates and work altogether much better than could have been expected.

I have one request to make of SNOWDROP, that for the future he will sign his proper name, as I may perhaps have an opportunity of inserting something for his gratification.

Martin Hall, May 4th, 1833.

T. K. SHORT.

Allow me to observe that I consider the remarks of your correspondent SNOWDROP to be rather hypercritical, for although you have very liberally invited the opinions of your subscribers and well-wishers, I do not consider that every one has a right to dictate either respecting the title or general plan of

the work, and it may surely be deemed sufficient for each, if proper notice be taken of their communications and information given on the particular subjects required, in fact were you to attempt to alter your plans at the suggestion of every one, you would soon be placed in the predicament of the old man with his ass in the fable. For my own part, not having a garden, your entire attention to Florists' flowers, as *he* suggests, would render your work wholly useless to me, and consequently I might with equal *modesty* and *propriety* request you to treat of *nothing* but exotic and green-house plants, because it is only such that I can cultivate in my little *plant Cabinet*, which, by the way, I understood by the *first* title of your work to be your original intention, though SNOWDROP could not imagine what that title had to do with flowers. In regard to the plates, I am not so fastidious as to find fault with them when I recollect the price. So long as they give a correct idea of the plant, it is as much as can be reasonably expected; but the Artist who colours them should be instructed to take notice of the description of the plant, as by neglecting this, he has given the *Schizanthus*, in your second number, a purple hue, instead of representing it flesh coloured, as described at page 14, No. 1. For those subscribers who wish for more *highly finished plates*, could you not publish a certain number of copies at 1s. or 1s. 6d.?^{*} I hope that you will not fail to furnish us with an index at the end of every volume, as the subjects are necessarily much scattered, and I think none of your subscribers could object to the additional expence of an extra number for that purpose.

In your last, instructions were given for the culture of the *Camellia*, but I should feel obliged by a little additional information on the subject, as I have lost several fine ones, which, after they had done blowing, threw out young shoots, and seemed increasing in growth rapidly until about July, when the leaves gradually blackened and dropped off, and the plants died down to the very root; some persons told me it was in consequence of my having given too much water, and others (Gardeners) that I had not given enough. My *Ericas* too shared the same fate, and though I have had many of the most beautiful and promising plants, I have never been able to keep them in a healthy state above two months after they had done flowering. A few hints on this subject when you can spare room, will be highly acceptable to

AN AMATEUR.

^{*} We have made arrangements to that effect, in order to meet the wishes of our friends. The Number for a copious Index will be attended to.—COND.

Every Florist is much indebted to you for establishing a work so much wanted, and so ably conducted, as *The Floricultural Cabinet*. Being myself an amateur, and knowing the wants of myself and others, I beg to throw out a few suggestions, in the hope that by attention to them, you will render your little work still more valuable.

In the first place, with regard to the Plates, it would be well to put under each flower the scale on which it is drawn; I mean one half or one third of the natural size, as the case may be, as is done in MAUND'S Botanical Garden. Take care the Plates are coloured correctly. This should be attended to, although of course elaborate shading cannot be expected.—As the work comes out but seldom, I should advise you to continue to give four flowers in the Plate as you have this month, in preference to one larger one. And I think you should be careful to give full directions for the culture of the flowers you figure, in the same number in which they appear.

The generality of Florists do not grow Stove Plants; therefore, I think your illustrations of Plants should be all confined to Greenhouse Plants, and those generally termed Florist's Flowers.

By the bye, in some instances your accentuation of Botanical names, and the mode you adopt of dividing the words at the place over which the accent is placed, prevents instead of assists in facilitating the ready pronunciation of them. This you should alter at once.

As I have made several experiments on the culture of different flowers which may be thought, perhaps, entertaining, I think I shall send some for your perusal.—Your's, &c.

B. M.

[We shall be much obliged by the favours.—COND.]

A REPLY TO THE REMARKS OF "SNOWDROP."—The last number of your *Floricultural Cabinet* is now before me, together with a small volume of Lord BYRON's works, which is open to the part which contains these lines—

"A man must serve a time to every trade
Save censure—critics all are ready made."

After reading SNOWDROP's letter, I cannot help thinking that they are very applicable to him and all such fault finding personages. He begins his remarks by finding fault with the name of your work. "I do not like the first title of your work, *Floricultural Cabinet*." "What has a Cabinet to do with a Flower Garden?" And then recommends you to apply the "pruning knife" to the letters of your correspondents. I know not who SNOWDROP is, but this I do know, *that he has no business* to recommend any one to throw the works of others into the fire, (*communications written only for the purpose of making public the best modes individuals have adopted with success in the cultivation of Plants, Flowers, &c.*) to make room for SNOWDROP's remarks upon the colouring of a flower, or the merits of "*Sweet's Florist's Guide*." As to the daubing part of the work, I must say, that though the Plants, Flowers, &c. are not so highly coloured as those in "MAUND's Botanic Garden," "SWEET's Florist's Guide," &c., they convey a very good and correct idea of the flowers they are intended to represent. Perhaps SNOWDROP has never thought that publications of a more expensive kind are quite out of the reach of a class of persons which the *Floricultural Cabinet* is very well calculated to instruct; I allude to Gardeners' Apprentices, &c. Now if the Plants, Flowers, &c. in Mr. HARRISON's book were more highly coloured, the work must of course be raised in price, and it would completely put it out of the power of many persons to obtain the book by raising the price, who are now able to subscribe. Upon the whole, I think that SNOWDROP's remarks are *not only uncalled for but unnecessary*, and I must in duty to Mr. HARRISON say, that all who have seen, and are subscribers to the *Floricultural Cabinet* in our neighbourhood, are perfectly satisfied with it, and hope it will continue to be conducted in the same spirited manner that it is at present.

J. C. H.

REPLY TO DAFFODIL, PAGE 67.—I have felt no small degree of surprise at the observations of your correspondent DAFFODIL, on the propagation of Dahlias by cuttings. DAFFODIL says, (in page 67) that, "from the joint inserted in the soil, the roots are produced." This is a great mistake, and I venture to say that DAFFODIL never saw cutting strike roots from the eyes or joint; but invariably from the bottom edge of the cutting, no matter whether there is a joint or not in the cutting for 4 or five inches, if there is only a joint above ground, it will strike and bloom as well as any other cutting will; but I admit it would be only a chance as to its producing any shoots the Spring following. Now if the eyes of the cuttings are cut out, it does not invariably follow that the root will not push again. I have tried the experiment, and know that not unfrequently the roots will push eyes from the bottom, and not push one at all from the crown where we generally expect them. A many cuttings of Dahlias are very much injured in the striking by keeping them too moist, and it often happens that the eyes (which it is very desirable to retain sound) are rotted. I have often examined shootless old roots, and I always find that the eyes are either cankered or rotted, which I mainly attribute to wire worms and insects eating them out; then wet gets in and destroys the eyes, and yet the root may still retain a degree of soundness. But if DAFFODIL will only carefully examine shootless roots, I feel confident that it is the eyes that have suffered, and are in a decayed state, which is the cause.

HIS LORDSHIP.

REPLY TO PRISCILLA, PAGE 20.—Priscilla asks for the best mode of cultivating the *Gloriosa Superba*. In reply to this application I beg to state, that I have bloomed the plant very freely under the following mode of treatment: The bulbs are kept in pots on a shelf in the back part of the stove, but not upon a heated flue. Very little water is given them, only as much as to prevent the bulbs from shrivelling. At the end of February or beginning of

March, they are carefully taken out and re-potted in fresh mould, &c. viz. one part turf loam, two parts leaf soil, one part sand. The pots I use for the first are only a little larger than the bulb, covering each about an inch deep. Having potted them, I place them in the Stove, avoiding the hot flue, till I see the roots have begun to strike. I then plunge the pots up to the rim in a bark bed; they soon push shoots and grow very vigorously. I train the plants to a trellis fixed upon the back of the bark pit wall, as soon as I judge that the pots are filled with roots. I repot the plants into larger pots, using the same kind of compost, with a tolerable addition of well rotted manure mixed with it. The plants afterwards require a free supply of water. I always use water which is about the temperature of the house; this is obtained by placing some upon the warm flue. The fine splendid orange-coloured blossoms, with the very singular mode of growing, give the plant a most imposing appearance.

Should *PARSCILLA* adopt the same mode of treatment as I do, I am confident his wishes in this respect will be obtained.

May 24, 1893.

J. BRADLEY.

I hope you will pause before you fill three supplementary numbers with accounts of Floricultural and Horticultural Meetings; however, if the accounts are confined to the supplements, those who do not wish for lists of names of successful candidates and flowers, need not buy them. You could, in half a page of your regular number, advert to such new flowers as may have made their appearance, and extract such information as may be valuable. One of your contemporaries has often a sheet or more of these meetings which might be as well omitted.

9th May.

C. M. W.

I am much pleased with your publication, which I have commenced taking, and shall continue so to do, if I find that *SNOWDROP's* hint in your second number, "that all the promises in the Prospectus will be kept," is properly attended to. I should, however, hope, that is after recommendation "not to give any plans of Greenhouses, &c." will meet with less attention. We are, I think in general, very deficient in cheap and well arranged edifices for the protection of flowers, and I should much like to see a few *good* plans occasionally appear in your publication, which may be done without "overwhelming us." Your correspondent T. B. must forgive my stating, that his receipt for the destruction of Woodlice is *not effective*; I tried it last year in two frames, without at all diminishing the numbers. A couple of toads placed in another frame, similarly situated, thinned them very perceptibly. My Dahlias are planted in beds by themselves;—will any of your correspondents have the kindness to inform me what flowers (except Crocuses and Tulips) I could previously put in these beds, so as to get them off in time to plant my Dahlias; and I am sure it would be gratifying to many of your readers, if you would give directions, so to arrange a garden laid out according to the present fashion, in beds, as to have a constant succession of flowers in blossom—I mean all the details.

C. A.

QUERY.—I am a novice in the art of gardening, and have several friends around me who are so likewise, but yet highly desirous of attaining to some degree of skill in it. In Floricultural works, I find frequent directions as to the soils most suited to the growth of particular plants, but am quite at a loss to understand what sandy loam, loam, sandy peat, &c. imply. Do pray enlighten your subscribers on this subject in one of the early numbers of your *Floricultural Cabinet*. Any instructions as to the preparation of different sorts of soils, will also be highly useful to your country readers. Practical hints as to the best mode and times of mixing soils would be much appreciated. We should also be glad to know how to detect the various kinds. I have never been able, with all my efforts, to produce a fine compact (yet not hard and clogged) soil, such as that which I get with flowers in pots from

Nursery Gardeners, which from this circumstance I always hoard and cherish as old gold.—Your constant reader, &c.

Crickhowel, May 16, 1833.

W. W. J.

QUERY.—I shall be obliged if you can inform me the best manner of treating Fuchsias in pots. I have this season purchased several; have kept them out of doors all day, and *taken them in at night*; but notwithstanding all my care, after I have had them a little while, all the buds (which when I bought the Plants were very numerous) have gradually dropped off without coming to perfection. Ought they to have been left out of doors all night? and till what month.

Camberwell, May 20, 1833.

AMATEUR.

QUERY.—I should feel obliged to any of your correspondents who would inform me through the medium of your delightful little work, how to treat the different varieties of flowering beaths, so as to preserve them through the winter, and to make them bloom the following year, which I have never been able to do; mine having almost invariably died, or produced no blossom. I have no greenhouse, but have always kept them in the dwelling-house during the winter, and have been careful to give them plenty of air and light.

A. PETERS.

LYCHNIS FULGENS.—C. H. wishes to be informed the culture of the above, particularly the preservation of the plants, so as to cause them to blow the second year, when he understands the flower is much finer than the first year.

QUERY.—Being very fond of the large Garden Pansies, and as I cannot find in any work any directions relative either to their culture or propagation, or to the raising new large flowered varieties, I should be glad if you would, in the next number of your useful Magazine, favour me with the best method you are acquainted with. By so doing, you will oblige, your's, &c.

Duffield, May 21, 1833.

E. D. W.

QUERY.—I shall be obliged if the Conductor of the *Cabinet*, or any of its readers, would give a few instructions on the culture of Cyripediums.

DELTA.

QUERY.—Your readers are very much indebted to Mr. HAWORTH, for his liberality in allowing his excellent paper on the Chrysanthemum to be printed in your Magazine, and to yourself for your exertions in procuring his permission. There are two or three points respecting this flower (an especial favourite of mine), on which I should be glad of some information. What is the best mode of culture to procure seed? What is the best method of flowering the shy ones, such as the Indian White, the Indian Yellow, the Warratah, &c. Can bloom be procured so early as August? I have some plants which did not flower last Autumn, and which stood the winter without injury; they are now large and fine, and I hope to see an early bloom on them. Has the following plan been tried, and if so, with what success—i. e. taking off cuttings, say in August, pinching out the flower buds, and getting them strong and well established before winter. Will such plants bloom early?

June 3, 1833.

SNOWDROP.

QUERY.—Is it possible to fruit the *Cerantonia siliqua*, "St John's Bread," in England? If so, how is it to be done? What is the colour and shape of the flower and fruit, and is it at all palatable? An answer will greatly oblige

Liverpool, May 30, 1833.

R. THORNTON.

REFERENCES TO PLATE.

1. *Oxalis Bowiei*, Bowies Oxalis, Decandria, Pentagynia. Oxalidæ. This most beautiful and florid plant is hardy, and in the open ground will flower in the Autumn; but it blossoms most profusely when kept in a pot under glass, especially if, after a short period of rest at Midsummer, it is placed in a stove or warm greenhouse for a very short time to make it start freely. Its

blossoms are produced in profusion, the flowers expand in a very moderate temperature. Culture: thrives in a sandy loam. *Oxalis*, from *oxys*, sharp or sour qualities of the plants.

2. *Lupinus elegans*, Drooping leaved Lupine, Diadelphica, Decandria.—Leguminosæ. A very pretty annual Lupine, native of Mexico, whence seeds were sent to the London Horticultural Society, by Dr. DEPPE, in 1831. It flowers in the open air most abundantly. Of all the annual Lupines, this is by far the handsomest; it even rivals the best of the perennial species. It is increased by seeds; soil, rich loam. *Lupinus*, from *lupus*, a wolf; supposed to destroy the fertility of the soil.

3. *Salvia pratensis*, Meadow Sage, or Clary. Diandria, Monogynia. Labiatae. Leaves oblong, heart-shaped at the base, crenated, the upper ones embracing the stem; whorls nearly leafless; upper segment of the corolla clammy. A beautiful plant about three feet high; leaves wrinkled; whorls of six flowers, scarcely longer than the floral leaves. Perennial: flowers in July; grows in dry pastures, and by hedges; rare, found near Cobham, in Kent; common in Surrey, Sussex, Wick-cliffs, Gloucestershire; between Middleton, Stoney and Andley, Oxfordshire. *Salvia*, from *Salvus*, safe; medical qualities.

4. *Iris Pseudacorus*, Yellow Iris, Water-Flag, or Flower-de-luce. Inner segments of the corolla smaller than the stigmas. Root large horizontal, acrid; stem from two to four feet high; leaves sword shaped, erect, deep green; flowers, yellow; three together on the top of the stem; the large segments lined with dark purple. Perennial: flowers in June and July; grows in marshy places, and by the sides of streams and lakes, generally in extensive patches. The root has been recommended for alleviating the pain of tooth-ache, and is used for dyeing black in the Hebrides. The leaves make excellent thatch; and are also employed for making bottoms to chairs. Dr. G. JOHNSON says, the roasted seeds make an excellent substitute for coffee. *Iris*, from *Iris*, the eye; the variety and brilliancy of its colours.

WEST-RIDING HORTICULTURAL SOCIETY.

On Wednesday, the first meeting of this Society for the present year was held at the Music Saloon, Wakefield. The room was nearly filled with fashionable company, amongst whom the "galaxy of beauty" alluded to by the Rev. Chairman in the course of the proceedings, as usual formed the leading attraction.

We understand that the Society was indebted to ARTHUR HEYWOOD, G. WENTWORTH, and B. GASKELL, Esqrs., the Rev. S. SHARP, and Mrs. FAWKES, (of Woodthorpe), for adding to the decorations of the room; Mr. BARRATT, of Wakefield, likewise furnished several decorations.

The display of fruits and flowers greatly exceeded that of any previous Spring exhibition; indeed but one feeling of admiration seemed to pervade the assemblage.

The chair was taken by the Rev. S. SHARP, Vicar, who said he could not but congratulate the friends of Horticulture on the present prosperous and flourishing condition of the West-Riding Horticultural Society. He need scarcely recal to their recollection the very mild and pleasant weather which had prevailed throughout the winter; but March and April—the latter usually full of smiles and tears—had been so cold and ungenial, that the lover of Horticulture almost anticipated the loss and destruction of those plants and

flowers which he had so fondly watched over during the winter months,—when radiant May came in, and those drear and chilling blasts were succeeded by mild and genial breezes, which speedily dissipated all his fears. His garden seemed to be changed as if by magic, and nature burst forth into universal life and vigour. Thus it had been with their society. During the winter all seemed to go on prosperously, but in March and April a chilling damp was cast over the institution, and the parent tree seemed destined to destruction. But on the 8th of May the thermometer got up to summer heat, subscriptions poured in, aid was offered from every quarter, and the sun of prosperity beamed upon them. There was, he believed, “a tide in the affairs” of societies, as well as in those of men, “which taken at the flood, led on to fortune.” It would therefore become the duty, as it was the wish, of all the members to take advantage of that patronage and support which the public had so kindly bestowed upon them. He would not further trespass upon their attention, but would proceed to distribute the prizes, which were adjudged as follows:—

[In giving the names of the Gardeners in the subjoined list, we have only thought it necessary to mention the names of the gentlemen in whose gardens the specimens exhibited were grown, once, in order to avoid repetition.]

HEATHS.

Nine pots—Thomas Appleby, gardener to the Rev. J. A. Rhodes, Horsforth Hall.

STOVE EXOTIC.

- 1 (3 pots) Wm. Barratt, Wakefield.
- 2 (3 pots) J. Wilkinson, gardener to Mrs. Fawkes, of Woodthorpe.

GREEN-HOUSE PLANTS.

- 1 (6 pots) Thomas Appleby.
- 2 (6 pots) John Menzies, gardener to Christopher Rawson, Esq. Halifax.
- 3 (6 pots) Samuel Currie, gardener to Arthur Heywood, Esq. Stanley.

HARDY PLANTS.

- 1 (2 pots) William Barratt, Wakefield.
- 2 (2 pots) John Menzies.

FINEST COLLECTION OF GREEN-HOUSE PLANTS.

- 1 John Menzies.
- 2 Thomas Appleby.

EXOTIC IN FLOWER (CHORIZEMA HENCHMANNI.)

Thomas Appleby.

GERANIUMS IN POTS.

Princess Augusta (2 specimens,) Chas. X. (2 specimens,) *Queen of Scots*, (2 specimens,) *Olympicum*.

1, 2, 3, 4 Samuel Currie.

Calvertii.—5 Martin Wice, Silcoats.

GERANIUM CUTTINGS.

- 1 J. Wilkinson.
- 2 Samuel Currie.

EXOTIC BOUQUET.

- 1 Thomas Appleby.

2 Martin Wice.

HARDY BOUQUET.

- 1 Alexander Morris, gardener to W Leatham, Esq. Heath.
- 2 George Yanwith, gardener to G. Wentworth, Esq. Woolley Park.
- 3 William Barratt, Wakefield.

GHENT AZALEAS.

John Menzies.

FUSCHIA GLOBOSA.

Thomas Appleby.

PANZIES.

Ten pots—Thomas Appleby.

CALCEOLARIAS (*cuttings*.)

John Menzies.

CALCEOLARIAS (*plants*.)

William Barratt.

SCARLET STOCK.

J. Wilkinson.

CACTUS JENKINSONIA.

W. Partridge, gardener to J. Ingham, Esq. Mirfield.

TULIPS.

Owing to the lateness of the season, the show of Tulips was very small, there being only three competitors, one of whom not conforming to the eighth rule of the society, which states that no person except he become a subscriber can receive prizes at the meetings of the society—was consequently excluded, although prizes would otherwise have been attributed to him. The other prizes were awarded as follows:—Thomas Appleby, 5 prizes; S. Poynton, Wakefield, 1 ditto.

In the Flower department, we noticed a Yellow *Neisette* Rose, by SAMUEL CURRIE.

The following Plants were exhibited by THOMAS APPLEBY :—*Erica vestita coccinea*, *odora rosea*, *perspicua nana*, *pregnans*, *ventricosa superba*, *Thunbergia*, *mirabilis*, *eximia*, *cupressiæ*, *vestita rosea*, *mundola*, *Elichrysium superbum*, *Elichrysium sesamoides*, *Pimelea rosea*.

There were thirty species and varieties of *Calceolarias*; and also a Seedling, raised by J. MENZIES, which attracted much notice, and which Mr. Menzies requested the Society to name *Calceolaria Hadfieldiana*, as a mark of respect to Mr. HADFIELD, one of the Curators, for his impartial and zealous exertions since the commencement of the Society.

A new plant in flower, supposed to be a *Quisqualis*, was exhibited from the Nursery of WM. BARRATT, raised from seed brought from Brazil by Captain ANDERSON. Also *Anemone Hortensis flore pleno*, and 14 varieties of Ghent Azaleas, from the garden of C. RAWSON, Esq.

The collection of very rare *Geraniums*, from the gardens of A. HEYWOOD, Esq. attracted much attention.

We hear that there is every probability of Lord MILTON accepting the office of President of this Society, and that his Lordship will take the chair at the future meetings. The next meeting will take place on the 24th July; and the third meeting on the 18th of September.

CAMBRIDGE FRORISTS' SOCIETY.

On Friday last, the show of Tulips, Anemones, and Stocks took place at the Concert Room, Hoop Hotel. The heat of the weather rendered the flowers less perfect than they otherwise would have been. In the evening the room was lighted up, and the Cambridge band added to the attractions of the show by the performance of several airs. The following is the decision of the judges:—

TULIPS.

Premium Prize for the best Tulip of any colour:
Triumph Royal, Mr. Twitchett.

FEATHERED BIZARRES.

- 1 Catafalque Superior, Mr. Twitchett
- 2 Trafalgar, ditto.
- 3 Duc de Savoie, Mr. Purchas.
- 4 Surpasse Catafalque, Mr. Peeling.
- 5 Trafalgar, Mr. Dickinson.
- 6 Lord Cochrane, Mr. Twitchett.

FEATHERED BYBLOEMEN.

- 1 Maitre Partoute, Mr. Purchas.
- 2 Ambassadeur de Holland, Mr. Twitchett.
- 3 Maitre Partoute, Mr. Peeling.
- 4 Transparent Noir, Mr. Twitchett.
- 5 Maitre Partoute, Dickerson.
- 6 Alexander Magnus, Mr. Twitchett.

FEATHERED ROSES.

- 1 Heroine, Mr. Twitchett.
- 2 Walworth, ditto.
- 3 Maria, Mr. Peeling.
- 4 Walworth, Mr. Nutter.
- 5 Heroine, Mr. Dickerson.
- 6 Compte Vergennes, Mr. Purchas.

FLAMED BIZARRES.

- 1 Grandeur Superb, Mr. Nutter.
- 2 San Josef, Mr. Peeling.

- 3 Charbonnier Noir, Mr. Twitchett.
- 4 Ditto ditto, Mr. Nutter.
- 5 Cato, Mr. Purchas.
- 6 Castrom Daloris, Mr. Peeling.

FLAMED BYBLOEMEN.

- 1 Roi de Siam, Mr. Twitchett.
- 2 Aquapulcha, Ditto.
- 3 Rubens, Ditto.
- 4 Roi de Siam, Mr. Purchas.
- 5 Gloria Alborum, Mr. Twitchett.
- 6 Gloria Mundi, Ditto.

FLAMED ROSES.

- 1 Triomphe Royale, Mr. Twitchett.
- 2 Matilda, Ditto.
- 3 Arbre de Dian, Ditto.
- 4 Triomphe Royale, Mr. Peeling.
- 5 Thalestris, Mr. Twitchett.
- 6 Andromache, Ditto.

ANEMONES.

- 1 Mr. Stearn.
- 2 Mr. Susanm.
- 3 Mr. Stearn.
- 4 Zoe, Rev. A. Fitch.
- 5 Mr. Stearn.
- 6 Mr. Catling.

SCARLET STOCKS.

- 1 Mr F. Smith.
- 2 Mr Catling.
- 3 Mr Bailey.
- 4 Ditto.
- 0 Mr Catling.
- 6 Mr Creeke, jun.

WHITE STOCKS.

- 1 Mr Hall.
- 2 Mr Hatt.

3 Mr Catling.

4 Ditto.

PURPLE STOCKS.

1 Mr Catling.

BEST PLANT IN A POT.

1 Cactus Speciosus, Mr Catling, jun.

BOUQUETS.

1 Mr Green.

2 Mr Catling.

BRISTOL HORTICULTURAL AND BOTANICAL SOCIETY.

The second Exhibition of this Society, for the present season, was held on Tuesday, in the newly erected room at the top of Park-street, in the internal appearance of which we are glad to observe a considerable improvement has been effected. The day was most propitious, and the company so numerous that at one time it became difficult to pass through the room, or to gain more than a transient view of the many attractive objects with which it was supplied. Numerous subscribers liberally sent their contributions for the decoration of the stand, which we have never seen better filled than on this occasion. The receipts at the door, from visitors, amounted to a greater sum than has probably ever yet been derived from the same source, whilst the eagerness with which new subscribers enrolled their names, and others paid up their subscriptions, affords a strong assurance of the stability and future success of the Society. The exertions of Messrs. LEE and MAULE, the assistant secretaries, to ornament the room, deserve great praise: their plants were very numerous, and many of them extremely choice—among others a superb *Erica vestita coccinea* of Mr. MAULE's was conspicuous, to which may be added some fine Azaleas and Rhododendrons. Mr. LEE exhibited some beautiful Heaths and Rhododendrons. Mr. MILLER also liberally contributed to the splendid gratifications of the day, amongst which may be enumerated a very fine *Cactus speciosissimus*, bearing numerous blossoms; a superb Hybrid Cactus; a *Jenkinsoni*, we believe, loaded with flowers; a very fine *Erica vestita purpurea*; a beautiful *Nymphaea cœrulea*, which in the morning was in full bloom, though it closed its petals towards the middle of the day; several new and brilliant *Calceolarias*, one of which (*C. pendula*) attracted particular attention; three varieties of *Salpiglossis*; a beautiful purple *Petunia* (*p. phœnicea*); a fine *Cypripedium spectabile*; a box, containing specimens of beautiful single and double *Pœonies*; and several others. Besides the articles exhibited for competition, to which prizes were awarded as mentioned below, we noticed several rare and most beautiful plants, which were kindly sent by subscribers to decorate the room. A *Coccoloba pubescens*, belonging to Mr. HENRY RICKETTS, attracted much attention. Mr. Alderman DANIEL sent a remarkable plant of *Cereus phyllanthoides*, engrafted in a noble column of *C. hexagonus*. The Society is also indebted to Mr. ISAAC ELTON,

for some very fine lemon trees, laden with fruit; to Mr. JOHN HURLE, for a very fine plant of *Thunbergia alata*, in full blossom, trained, on a wire trellis, into a beautiful cone; Mr. J. W. HALL, a very fine *ignonion capreolata*, in full blossom; Mr. DANIEL CAVE, a very fine *Cactus speciosissimus*; Mr. J. PRIDEAUX, a noble lemon tree, full of fruit; the Rev. Mr. ELLICOMBE, two large baskets of White *Rosa Banksiæ*, loaded with flowers, which cast forth a fragrant perfume; Mr. TAUNTON, a basket containing branches with their blossoms of above twenty species of hardy arborescent and frutescent plants, and about twenty species of roses in bloom, being all which had hitherto expanded in the open air. This Exhibition was productive of great enjoyment to a very numerous and fashionable assemblage, and the interest which they took in it is one of the best indications for the future progress of the Society. We are informed that the Committee are still studying every possible improvement for the better convenience of the subscribers and visitors. The following is a list of the prizes of flowers:—

TULIPS.—FEATHERED BIZARRE.

- 1 Mr Holbrook.
- 2 Ditto.
- 3 Ditto.

FEATHERED ROSE.

- 1 Mr Holbrook.
- 2 Mr A. Jones.
- 3 Mr Holbrook.

STOVE PLANTS.

- 1 *Nerium coronarium*, Rev Dr. Swete.
- 2 *Gloxinia speciosa*, John Hurle, Esq.

GREENHOUSE PLANTS.

- 1 *Cactus speciosissimus*, Mrs Brooke.
- 2 *Metrosideros citrina*, G. Bush, Esq.

- 3 *Hæmanthus undulata*, Rev. Dr. Swete.

- 4 *Hæmanthus coccinus*, O. Fedden, Esq.

HARDY PLANTS.

- 1 *Bignonia capreolata*, Mrs J. W. Hall.

- 2 *Pæonia moutan*, Rev. J. Whitfield.

HARDY PERENNIALS.

- 1 *Iris susiana*, Rev. H. T. Ellicombe.
- 2 *Saponaria ocymoides*, H. Myers, Esq.
- 3 *Aquilegium* var. Rev. H. T. Ellicombe.

MONTHLY FLORICULTURAL CALENDAR FOR JULY.

ANNUALS, TENDER.—Those sown late, if now planted out, will bloom early in September. Hardy Annuals, if now sown, will come into bloom the latter end of September.

AZALEAS, should now be propagated by cuttings of the young wood.—(See page 8.)

BIENNIALS, (Sweet Williams, &c.) seeds of which may still be sown; such as were sown early, and are strong plants, should be planted out.

CARNATIONS may now be layed, or raised from cuttings, cut immediately below the second or third joint, according to the condition of the grass, and planted under a hand-glass or frame.

DAHLIAS.—(See pages 3, 22, 66, 95.)

ERICA, cuttings of which may now be put in.—(See page 48.)

MIGNIONETTE, if now sown, flowers at the end of September.

PINKS should now be raised from cuttings or pipings.

PELARGONIUMS propagate by cuttings.—(See page 88.)

RANUNCULUSES and **ANEMONES**, if now planted, will bloom about the middle of September. Those out of flower should be taken up.

ROSE TREES.—This is the best season for budding Roses of any kind, except the China Rose and its varieties.

VIOLETS should now be propagated by dividing the roots, or by cuttings, placed under hand-glasses.

RIDGE, PRINTER, SHEFFIELD.



Lotus corniculatus



Enothera tenella var. *tenuifolia*



Nerembergia Phaeica



Veronica Chamodrys

THE
FLORICULTURAL CABINET,

AUGUST 1st, 1833.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Cultivation of the Chinese Chrysanthemum.* By IRIS.

I beg to offer a few remarks on Mr. HAWORTH's paper on the Chinese Chrysanthemum, inserted in your Number for May, more particularly on his improved method of cultivation. Mr. HAWORTH does not approve of the method usually adopted, but prefers that the plants should be annually parted, and transplanted at the foot of a south or west aspected wall. Now with respect to wall training, I have for many years practised it with very great success, and can testify, that where so valuable a commodity as a south or west aspected wall can be spared, this lovely plant will repay every care and answer every expectation; but to hope for entire success, particularly with many kinds which bloom late, it is necessary to vary the method recommended by him of planting the sucker at once against a wall. No plant is more apt "to quail before the sun" than this, and this flagging very much delays the growth of the young sucker; it is long making root, and frequently, without care, dies. The method I have adopted with suckers with complete success, not losing one out of a hundred, is to take them from the old plants early in April; pot them in 60's, one in each pot; put them in a cold frame exposed well to the sun, but

B

shaded with a mat, keeping them very damp, watering over the leaves, and shutting down the lights quite close. In a few days they strike fresh root ; I then give them air by degrees, and in a few days more they are fit to be turned out of the pots, with the earth entire, where they are intended to remain. By this method, at least a fortnight is gained, and this slight forcing, so far from "irretrievably", or at all weakening them, decidedly helps them forward. I have raised cuttings in this way with equal success, scarcely a leaf has flagged.

Constant watering is essential to the well doing of the Chrysanthemum, more particularly when placed against a south or west aspected wall, and manured water should be often used ; that of a mixture of soap-suds and horse-dung seem the best.

Autumn planting I entirely dislike, and except from necessity, should never be adopted ; cuttings never do well, and suckers very seldom. As to training, if the object be to get tall plants, I have three stems ; if they are wanted bushy, one stem is sufficient, the top of which should be pinched off about June, and the fan fashion of training is decidedly the best ; many of the branches may be trained back and made to bloom down to the root, and the effect is very superior to the flowers only appearing at the extremities of the branches. Thinning the flower buds increases the size of the remaining flowers. A very good plan, where late flowers are required, is to leave three stems, train the centre one against the wall as above recommended, and shorten and peg down the other two, one on each side ; the tops of the branches will raise themselves, and a profusion of bloom may be thus obtained ; or if obliquely trained, the same result will follow, but the extremities in this case should not be nipped off.

The above method, with suckers and cuttings, I have found decidedly the best for plants in the open ground.

As to plants in pots, which are so very desirable for the Greenhouse, Mr. HAWORTH says not a word ; perhaps it may be of use, to some of your readers, to state very briefly, a few very successful methods of growing them in pots.

In the beginning of April, take cuttings five inches long ; plant them in thumbs or small 60's, one in each pot, in mould of about one-fourth sand, one-half loam, and one-fourth vegetable mould ; treat them as above, and in June shift them into 48's in the same

soil, except that old frame dung may be substituted for the vegetable mould. At the latter end of June, nip off the top of the leading shoot; in August, shift into 32's, with the same compost as last-mentioned; place in the sun, and water in hot weather over the leaves with clear water, and the pots occasionally with manured water and soap-suds diluted. Moss placed over the surface of the mould, prevents too great evaporation. If a gentle hot bed be handy, it will be preferable to give the cuttings the advantage, and the plant loses no time in striking. The shifting is of very great utility in forwarding their growth.

Fine plants may be obtained by layering about the latter end of June. The extremities of the shoots at about the third or fourth joint, are to be pegged down in pots placed at proper distances; in four or five weeks they will be found to have rooted, and may be shifted at once into pots to bloom; a shady place is perhaps the best adapted for this *manipulation*. By these latter methods, handsome plants from one to three feet high may be obtained. If very dwarf plants should be required, they may be obtained from cuttings struck even as late as the beginning of August, on a gentle bottom heat, well shaded and watered. They will root in a short time, and should then be hardened by degrees, and shifted into 48's to bloom; the sizes of the plants in their natural state, as given by Mr. HAWORTH, will be a guide as to the height wished for.

A superb effect is produced with these delightful flowers by placing, in October, the pots on their sides about a foot apart in a bed, (a ranunculus bed is well adapted,) and covering the pots with earth. They should be placed in rows, the second row being placed about a foot behind the first, and so on in succession; the stems should be pegged down; in a few days the flower stems will turn up, and if the colours be well blended, nothing can exceed the richness of this display. To keep the bloom in perfection, some protection, by means of an awning from rain and frost, is necessary; and, if this be adopted, the prolongation of their bloom will be greatly increased. Such is the kindliness and good nature of this plant that it will yield to any mode of culture, and among a variety, of course, the one best adapted to the wishes and means of the florist will be followed. The above, however, can be recommended as the result of successful experience.

In conclusion, I would observe, that plants should not be allowed to remain more than two years in one place, without being taken up and the earth removed, and fresh rich earth supplied in its place. For the plants in pots, top-dressing is very beneficial.

June 1, 1833.

IRIS.

ARTICLE II.—*On Raising the Ranunculus from Seed.*

By MR. J. MILES.

As you express a desire to know my method of raising the *Ranunculus* from seed, I feel a pleasure in giving you the desired information; but at the same time, if any of your correspondents know a better mode of raising them, I shall be highly gratified to see it in your interesting *Floricultural Cabinet*.

Having collected a quantity of seed from the best semi-double flowers, taking care the petals are large and good in colour, I keep it on the heads of the stalks in a dry place till April, when I rub it off in order to sow it, having previously prepared a compost of the richest loam, composed of one-third rotten dung from a cucumber bed, and two-thirds of trenching earth from rich meadow land. I fill the largest pots I have up to the top, taking care to level the soil; I then take the seed and sow it, but should it not appear to be equally sown, I take a feather and just move it so as it be equally spread all over the pot, and with the bottom of another pot press the seed and earth about half an inch from the top; as soon as this is done, I cover it by sifting some fine earth upon it, about the thickness of a crown piece; I then give it a gentle watering by means of a hair sieve, or one made from coarse stiff muslin, strained on a hoop sufficiently large to cover the surface of the pot, and prevent the earth being washed from the seeds. This method appears to me quite as well as pipes luted to the pots, (as described in your number for March,) and at considerable less trouble and expense. The pots are then placed in a situation where the sun cannot have the least influence by shining upon them; in about four or five weeks the plants appear, and at that time I find it necessary to keep them well watered, and when the weather proves dry in the following month (May), they are watered every day. I have at this time several thousand

seedlings by me in the garden, and had they been exposed to the intense heat of the sun and not watered, I should have lost them to a plant. In the month of August, the foliage will begin to decay, and when sufficiently ripe, the roots must be taken up, which can be easily done in the following manner:—Take about one inch and a half off the surface of the pots, and place it on a table, where you can easily discover the roots, (some of which have only one claw, and not larger than a common sewing needle); they are to be put into a box covered with fine sand, and kept in a dry place till the time of planting; say the latter end of January, or beginning of February. The first fine open weather, I plant my seedlings, similar to the old roots, with this difference:—the planting board I make use of is only three inches from the centre of one hole to the other; after the holes are made, I put one root in a hole with crown uppermost, and cover with some of the same compost that I use when I sow the seed; after they are come up, should the weather prove dry, they are watered every day, or else they will not bloom. I select the finest for my best bed, and the remaining semi-doubles whose petals are good, finely striped, spotted, or edged, I save my seed from.—Your's, &c.

Hilpertou, June 11, 1833.

JAMES MILES.

ARTICLE III.—*On the Culture and Propagation of the Genus Nuttallia, viz. digitata, pédata, and grandiflora.* By Mr. J. MENZIES.

I am not aware of any opinion having been given on the culture and propagation of the above beautiful plants, which if you think worthy of a place in the *Floricultural Cabinet*, they are freely given.

The Nuttallias are natives of North America, and from their scanty production of shoots and the uncertainty of raising them from seeds, hitherto are scarcely to be seen amongst collections of ornamental plants.

The plants in March being turned out of pots on a bed, the soil of which is a mixture of peat, loam, and vegetable soil, they will grow to the height of four feet; after flowering, which will

be about the middle of October, they are cut down, one or two being taken up as is necessary; some should be in pots during winter, kept either in a cold frame or Greenhouse. Before potted, the largest roots I break off, leaving sufficient to support the plants; the roots then are potted in proportionable sized pots. In potting them, the broken end should stand a quarter of an inch above the soil, and then be placed in the Greenhouse, taking care that they do not get much water, as the soil in the pots will be sufficient to keep the roots in a wholesome state during winter. In the first or second week in March, on an examination of the roots, it will be perceived that from 8 to 12 growing buds are showing round the inside of the bark, I then give them a little water; when the buds grow to the size of a pea, I turn them out of pots, and with a sharp knife, commencing at the bud end, I split the root through, and so on, leaving a bud on each part so cut. In potting them, care should be taken that the new roots are not injured, as the future success of the plants depends on them. After potting them, I give them a little water and place them in a shaded part of the stove, where, in the course of a week or ten days, they are removed to the Greenhouse, when they are treated as before. I have had a small root of *N. digitata* this Spring divided to eight fine plants, some of which are coming into flower.

The *Nuttallias* treated as Greenhouse plants will have a fine appearance at this time, with *Sapiglossises*, *Calceolarias*, *Ericas*, and *Alstroemerias*, &c.—

Hope House, near Halifax, }
June 13, 1833.

JOHN MENZIES.

ARTICLE IV.—*On Raising Ranunculuses from Seeds.*

By H. G. S.

Should you think the following worthy a place in your *Florist's Magazine*, I should feel much obliged by your inserting it in an early number.

Ranunculus seed is to be procured from semi-double flowers; care should therefore be taken to save it from such as are possessed of good properties, viz., such as have tall strong stems, a

considerable number of large well-formed petals, and rich good colours, chiefly preferring the darker, but not to the exclusion of the lighter coloured when their properties answer the foregoing description. The seed should remain on the plant till it has lost its verdure, and becomes brown and dry; it may then be cut off and be spread upon paper, in a dry room, exposed to the sun, that every degree of humidity may be exhaled from it, in which state it should be put into a bag, and preserved in a dry warm room till the time of sowing, otherwise it will be in danger of contracting a dampness, which will soon produce a mouldiness that will infallibly destroy it.

January is the proper time to sow the seed, and in order to prepare it, it must be separated from the stalks to which it is connected in the following manner, viz. :—In the first place it should be taken out of the bag and spread thin upon paper, or a tea-tray, &c. and placed before a moderate fire till it is just warm and no more; the seed will then easily scrape off by means of a penknife, but great care must be taken to avoid scraping it off in lumps, or suffering any pieces of the stalk, dried petals of the flower, or other extraneous matter to be mixed with it, which would create a mouldiness when sown of very destructive consequence. When the seed is scraped in a proper manner, it will have much the appearance of clean coarse bran, with a little brown or purple speck in the centre of each cuticle, which is the kernel.

When the seed is thus prepared, it should be sown on a shallow frame, provided with glasses similar to those made use of for cucumbers and melons; the soil should have been previously taken out, three feet deep, and spread thin upon the ground till it has been perfectly frozen throughout, in order to destroy any vermin it may have contained. When the pit is filled up again with the frozen lumps of earth, it should remain till the whole mass has thawed and subsided to its pristine bulk, or nearly so; its surface should then be made perfectly smooth and even, and the seed sown upon it with the utmost regularity, in such quantity nearly to cover it; the glasses should be placed over it immediately, and the frame kept closely covered with them for two or three days, till the seed begins to swell and soften; a little light earth should then be sifted upon it through a fine sieve, but not sufficient to cover it,—this should be repeated once or twice a

week, till the greater part of the seed disappears. It is proper to remark, that such seeds as happen to be covered deeper than the thickness of a half-crown piece will never vegetate, and must, of course, inevitably perish. It is necessary that the seed be kept moderately moist by gentle watering with soft water that has been exposed to the sun, but too much moisture is nevertheless injurious.

About the time that the plants begin to appear, it is requisite to stir the surface of the earth with a pin just sufficient to admit air, and give liberty to the young plants to pass easily through; this operation should be very carefully performed to prevent breaking off the fibres, or raising and leaving any of the plants out of the earth, because one hour's sun upon such would certainly destroy them. After the plants are all up, and their two interior leaves appear, more air must be given, by having hurdles or lattice-work substituted for the glasses; waterings must be regularly continued in the manner before described, when the long continuance of dry weather renders it necessary; but fine warm showers of rain are always preferable when they happen in due time.

This kind of management is to be continued till the roots are matured and fit to take up, which is known by the foliage becoming brown, dry, and nearly consumed. The roots are to be dried and preserved in the usual way, and to be planted the same time as large ones in the Autumn; the greater part, or such as have two or more claws, will bloom in tolerable perfection the following summer.—Your's, &c.

H. G. S.

ARTICLE V.—*On the Treatment of the Crassula coccinea, and Crassula versicolor.* By G. HARRISON.

Exotics vary in some respects in their culture as much as one genus does from another, and even the species belonging the same genus often require very different treatment in order to their success; such being the case, every florist will be solicitous to ascertain the best method of bringing plants to perfection. I have repeatedly heard Ladies and Gentlemen express their greatest satisfaction in perusing over the pages of the *Florist's Magazine*, and that

the same have been a stimulus to their purchasing many plants. I frequently find both Ladies and Gentlemen particularly attached to Floriculture, and who have not the means of employing a practical gardener, have many plants perishing for want of proper treatment; this is certainly a great damp upon their future success, but this disappointment will in a great measure be obviated through the usefulness of the *Florist's Magazine*. Being a great admirer of the *Crassula coccinea* and *Crassula versicolor*, and often meeting with plants totally destitute of bloom, induces me to send this paper for your insertion, which I hope will prove of some benefit to those persons who are growers of these plants.

In propagating these plants, I take off cuttings in March. I find it very essential to dry them a little previous to planting, as being succulent they are apt to damp off; each is cut off close under a joint, and about five inches in length. The pots I use are 32's; I place at the bottom of each pot about two inches deep of potsherd, broken small; upon these one inch deep of mould, then two inches of white sand, in which the cuttings are inserted; six or eight may be planted in one pot; the pot is filled up with mould, which is pressed close round each cutting. The pots are plunged into a hot-bed frame at from 70 to 80, which soon causes the cuttings to strike root; I give no water until the cuttings begin to grow, when a little is given with caution. As soon as they have got well rooted, I pot them off into 48 sized pots, one in each pot. The compost I use is of equal quantity of rich loam and peat earth, with one-sixth part added of lime rubbish, broken fine. I have repeatedly used various other composts, but always found the plants to succeed the best in the above. I re-plunge the pots into the frame, and admit at all times as much air and water as the season will admit of. Should any of the cuttings not throw out more than one shoot, the end is pinched off, which will cause the emission of a number of shoots for blooming the following year. The plants are kept in a humid temperature until October, when a little water and heat will be required until March following, when as many plants as are intended to bloom early are plunged into a brisk heat, either in a hot-bed frame or pine pit, which soon causes the production of a number of corymbs of blooms; as soon as these appear, the plants are re-potted into 32 sized pots, with their balls as entire as possible;

I give a little water, and re-plunge them into the bed; when the blossoms are beginning to expand, the plants are removed into the Greenhouse, and by being kept from the hot scorching sun, they keep in bloom for several weeks. By removing a quantity of plants every three or four weeks from the cool frame into the hot-bed or pine pit, I have been enabled to have fine blooming plants from May to October following. Those plants which have flowered in March following, may be turned out of their pots, and the balls partly reduced, when they may be re-potted and managed in every respect as before stated for blooming plants. Plants raised from cuttings when from one to three years old, are by far the best for blooming, and are far preferable to old plants being cut down. I have for several years flowered from one to two hundred of these plants every season, specimens of which have been exhibited at different Floricultural meetings. In June, 1831, I turned out 36 large plants into a bed in the flower garden, which was one complete mass of bloom for several weeks.

Downham, June 6, 1833.

GEORGE HARRISON.

ARTICLE VI.—*On the Cultivation of the Gentiana acaulis, or Gentianella.* By Mr. J. C. HALL, Jun. of Wiseton.

In your number of last June appears a query by a CONSTANT READER," requesting to be informed how to cultivate the *Gentianella*. As I have cultivated it with very great success, and as we have not a flower bed scarcely in our garden that has not a border of them, I think it will not be presumptuous on my part to lay before you the method I adopt in their cultivation, and if you deem my remarks worthy of a place in your *Floricultural Cabinet*, you would much oblige me by inserting them in your next number. Having obtained a root of the *Gentianella*, I divide it into as many plants as I can, (this I do in Autumn,) and plant them round our flower beds so as to form a border. When those plants get larger, I divide them again. They flourish with us in almost any soil, but prefer peat. I divide the roots at all seasons, (perhaps Autumn is the best,) and find that they require not the least

attention, except a little water when first planted. By this treatment the *Gentianella* flowers with us in great perfection; and if your correspondent adopts this method, I have no doubt but he will get it to bloom in profusion.

Wiseton, June 4th, 1833.

J. C. HALL, Junr.

ARTICLE VII.—*On the Cultivation of the Polyanthus.*

By Mr. WM. JACKSON, Florist.

The readers of the *Cabinet* will, with very little observation, justify my remark when I state that no plant delights more in a FREE and PURE AIR than the *Polyanthus*; from which circumstance it is very rarely found to flourish near large towns, excepting those towns that are situated in elevated places. The air near large towns is generally very impure and opposed to vegetable life, and from the fact of particles of dust and soot falling upon the stems and foliage of the plants, the pores are closed up by it, and the plants are then prevented either absorbing or respiring in the way they require; the result is, they frequently die, and even such as live only produce few and feeble blossoms. I observe in the *Cabinet*, page 42, in your instructions relative to the treatment of plants growing near large towns, or by the side of public roads, you recommend a frequent application of water over the foliage, &c. I have no doubt but such attention will amply repay for the trouble with most plants, but the *Polyanthus* would not endure a frequent application of water at any stage of its growth; but after having done blooming, it requires rest, and the application of water sufficient to wash off the dust and soot would very soon rot the plants. The *Polyanthus* is very often killed in the drought of summer; it is therefore necessary to have them screened from the scorching sun; like the wild *Primrose*, which delights in the shady bank of a wood or hedge, so the *Polyanthus* requires to be accommodated. This may most readily be done, whether in pots or the open ground. In planting the *Polyanthus*, care should be taken to have the plant inserted in the soil so deep that the leaves are close upon it; this is required, in order that the new roots, which are often produced very high up the stem of the plant, may be able to strike into soil.

The finest sorts of Polyanthus—such as are named at the end of this article—should always be grown in pots, and the pots be plunged in a frame made according to the description given below. Many other kinds, as Cox's Regent, Fletcher's Defiance, and Tanterarara, which are of a luxuriant habit, will thrive well in the open border.

The soil in which I find the Polyanthus to flower the best is a strong fresh loam, with one-sixth of well-rotted cow's dung, and a small portion of sand or gravel intermixed, and about one-fourth of leaf mould.

The season of potting or replanting is after the plants have done blooming, and the seed is nearly perfected. This is generally the case about the end of May. In doing this, be careful to have the pots well drained, and for beds to have them raised higher than the surrounding ground. With old plants be careful to cut off the bottom carrot-like part of the stumpy root, retaining that part only that has plenty of young fibres. In dividing the plants, care should be taken not to take any offsets but such as are strong, and likely to be vigorous flowering plants; when the offsets are small, they generally die before the end of summer. After potting, water the plants freely, in order to settle the soil well to the roots. The plants must then be placed in a shady situation, but at the same time where they can have a free admission of air. They must not be watered again until the plants give signs of having struck root.

About the end of October, the plants in pots must be dressed, and placed in a pit or frame, if of wood; the outside of it must be protected by coal ashes, earth, or something of the sort. The pots must be placed on bricks, so that air can freely circulate round the plants, and be raised to about a foot from the glass. It is advisable to plunge the pots up to the rims in coal ashes at the bottom of the frame or pit, in order to prevent slugs for creeping, and preserve the roots. All the air that can be given should be admitted, so that the plants are not injured by wet, as frost rarely damages them. They must be kept moderately dry during November, December, January, and February; at the end of the latter month, they will begin to push a little, when more water may be applied. The plants I have in the open ground, I place a brick fence round them, and cover by a wooden shutter during

the winter season, and sprinkle coal ashes or lime scraps round the outside of the bed.

About the first week in March, I top-dress the plants by taking away an inch of the surface soil and substituting some rich compost. As soon as I can, I thin out the flower pips so as to leave about six outside ones. By the end of April the plants are in full flower. I then shade them from the sun to preserve the colours uninjured. When the flowering season is over, I remove the plants in pots to a suitable airy, shaded, situation in the garden. When the plants are infested with green fly, I sprinkle diluted tobacco water over them. If seed be desired, I gather it when ripe, sow the following spring and raise them in hot bed frame. As soon as the plants are up, I gradually harden them, till they are strong enough to transplant into single pots, or into the beds. When they bloom, all pin eyes I cast away, retaining only those that have fine yellow or golden edge, and strong ground colours. The finest sorts yet cultivated are Waterhouse's George 4th, Buck's George 4th, Haworth's William 4th, Stead's Telegraph, Cox's Regent, Nicholson's Bang Europe, Hufton's Lord Brougham, Hufton's Lord John Russell, Hufton's Lord Grey, Billing's Queen, Parke's Nelson, Turner's Emperor, Crownshaw's Invincible, Billington's Beauty of Over, and Fletcher's Defiance.

W. JACKSON.

PART II.

EXTRACTS.

Botanical Magazine. By Mr. CURTIS and Dr. HOOKER. Price 3s. 6d. coloured.

1. *Limncharis Humboldtii*, Humboldt's, class Polyandria, order Polygynia. Nat. order, Butomææ. Seeds of this plant were sent from Buenos Ayres to the Botanic Garden at Liverpool, where plants were successfully treated in the aquarium by Messrs. SHEPHERDS, and the delicate handsome flowers burst forth in April, 1833. It grows near Buenos Ayres in pools, or ditches of fresh water. Flowers: Corolla of three large handsome concave, obovate, spreading petals, of a delicate primrose colour, faintly striated, rather a deep yellow at the base. Culture: increased by suckers, and planted in moist soil;

the plant to be kept in water. *Limnocharis*, from Limon, mud, and charia, grace, or ornament. Its beautiful flowers adorn moist muddy places.

2. *Oxylobium ellipticum*, Elliptic leaved, Decandria Monogynia. Leguminosæ. It appears from the Hortus Kewensis, that this plant was introduced from Van Diemen's Land, by Mr. BROWN, in 1805, but it seems afterwards lost. Seeds, however, were received at the Edinburgh Botanic Garden from Van Diemen's Land, through W. HENDERSON, Esq. in February, 1829, marked Prussian shrub. The plant has been treated in the Greenhouse in the usual way of New Holland shrubs, and in April last, when above three feet high, it flowered for the first time, every subdivision of its numerous branches bearing upon its apex a crowded bunch of flowers. They are of a fine yellow colour, and in terminal capitate spikes. The profusion of flowers with which it is covered, and the continued succession of these during a long while, renders it a very desirable species for cultivation, Graham. Culture: increased by cuttings; soil, sandy peat. *Oxylobium* from Oxya, sharp; lobos, pod; pointed pods.

3. *Trillium erectum*, var. *viridiflorum*; upright stalked; pale green flowered, variety. Hexandria Trigynia, Smilacæ. Plants of this variety were received at the Glasgow Botanic Garden from Canada, sent by Mr. CLEGHORN, and they flowered under a frame in the month of April, 1833. Culture; increased by division of root; soil, sandy peat. *Trillium*, from Trilix, tissue of three threads; triple-leaved calyx.

4. *Leucopogon Richei*. Riche's *Leucopogon*. (*Styphelia parviflora*, Andrew's Repository, t. 287, mala; *Leucopogon parviflorus*, Lindley, in Bot. Register, t. 1560.) See page 14 of this work for description, &c.

"We gather from M. LABILLARDIERE, (the Botanist of the expedition,) that on the morning of the 16th of December, 1792, a boat having been sent from L'Esperance to the main shore, for the purposes of Astronomical observation, Citizen RICHE (attached as Naturalist to that vessel) accompanied the party.

"Quitting the beach on which he had landed, (some miles westward of Cape le Grand, in long. 121 $\frac{3}{4}$ ° E.) and with the design of returning early in the afternoon to the boat, 'that Naturalist,' says LABILLARDIERE, 'became enraptured with the riches and novelty of all the productions of that region, which no observer had hitherto visited,' and, quickly losing his way, he wandered to some distance inland, over a desert country, occasionally presenting plains of calcareous sand; nor was he able to find his way back to the landing place until the third day! so that the distress which his absence had occasioned on board the ships was extreme. A boat was despatched on the second day from each vessel in quest of the lost Naturalist, and the admiral ordered guns to be fired every half hour, to enable M. RICHE, if still alive, to direct his steps with the greater certainty towards the anchoring-place: M. LABILLARDIERE himself was of the party.

"The parties traced his course over the sterile waste he had traversed, to the edge of a large lake, which they concluded had a communication with the sea, as its waters were salt. The print of his shoes, observed on the margin of this considerable water, furnished encouragement to proceed in their search, but the marks of naked feet which appeared near his, gave grounds for apprehending that he had been dragged by the savages into the interior country. Moreover, one of his pistols and his handkerchief were found on the sands; and these strengthened in their minds, their apprehension of his fate. Further on, the little smoke that arose from a deserted fire directed their steps to the spot, and near it they found bits of paper on which they recognized the hand-writing of the unfortunate man. Around them, the dismal waste extended far and wide, but no further trace of M. RICHE was to be found; when as they were returning towards the landing place, lamenting the fate of their unfortunate messmate, and had nearly reached the shore in a hopeless state of mind, they beheld one of the boatmen running to meet them, with the pleasing intelligence that RICHE was still alive, and that he had just arrived at the landing place, extenuated with hunger and fatigue, having

been upwards of fifty-four hours on shore, with no other provision than some bits of biscuit. When he had recovered from the state of stupor into which he had been thrown by so long a privation of nourishment, he told his companions that he had lost himself on the first day; but that near the fire which he had found burning, there was a little rill of fresh water, at which he had quenched his thirst, and urged by hunger, he had ranged about in the neighbourhood, and in the thickets had discovered a shrub which furnished him with some small fruit, but in a quantity insufficient for the supply of his necessities. To that shrub, the plant we have here defined and figured, M. LABILLARDIERE, who originally described it, attached the name of the recovered Naturalist, as much out of compliment to him, as with a view to perpetuate the remembrance of the circumstances under which it had been discovered.

"At the little spring of water,—a rare discovery in the midst of an arid waste,—he passed the first night, and the next day was wholly spent in a fruitless attempt to gain the landing-place. 'In all this painful peregrination,' says LABILLARDIERE, 'M. RICHE did not meet with a drop of water, although he saw in those wilds, at some distance from him, Emus, Kangaroos, and even some of the aboriginal inhabitants, who, however, fled before him as he advanced:—but chance (rather, a kind Providence) happily conducted him in the evening to the same little rill, where he spent a second night.' Notwithstanding the distress to which his situation had reduced him, exposed as he was to all the horrors of famine, M. RICHE carried during these two days 'a numerous collection of very interesting productions' of the country he had traversed; 'but during the third day, his strength sunk so rapidly,' before he reached the boats, that 'he was obliged to abandon the whole collection, not being able to reserve even the most precious articles.'

"This first landing on the inhospitable shores of Nuyt's Land by the French, was not, however, wholly lost to science; for M. LABILLARDIERE, amidst his anxiety to urge the prosecution of the search for his lost countryman, did not fail to make some observation on the few birds that inhabit the shores, nor to form some little collection of the fine plants which, notwithstanding the aridity of the soil, were nevertheless able to maintain an existence. Thus, among other plants, with which that painful excursion first made us acquainted, may be enumerated, besides our *Leucopogon*, *Banksia repens* and *nivea*; *Chorizema ilicifolia*; *Eucalyptus cornuta* and *Anigozanthus rufa*. The last notice we find of M. RICHE, after his return to France, is from LABILLARDIERE himself, namely, 'that he fell a victim to his love for science, having made, when already in a very advanced stage of consumption, a long and fatiguing journey, in which he consulted his scientific zeal more than the state of his health.'

"Mr. BROWN has substantially perpetuated his memory, by giving his name to a very singular plant likewise of this Order, growing abundantly on the summit and sides of Mount Wellington,* near Hobart Town, Van Diemen's Land, which would therefore be almost hardy in our gardens, to which, however, it remains yet to be introduced."

5. *Primula amana*. Purple Caucasian Primrose. Pentandria Monogynia. Primulaceæ. This most desirable addition to the cultivated species of a universally admired genus, was obtained by Mr. NEILL, from Mr. GOLDIE, who brought it from St. Petersburg. It flowered beautifully in the cold frame at Canon Mills, Edinburgh, in April, 1833, producing an umbel of eighteen perfect flowers. Flowers: Corolla very handsome, purplish-lilac in bud, or when recently expanded; more blue after a few days; tube purple on the outside, yellow within. Culture: increased by division of the plant; soil, sandy loam. *Primula*, from *Primus* the first; time of flowering.

6. *Epacris nivalis*, snowy *Epacris*. Pentandria Monogynia. Epacridææ. This exceedingly beautiful species was introduced into the garden of Messrs.

* This remarkable mountain is about the same elevation above the level of the ocean, as Ben Nevis in Scotland, and its summit is covered with snow during the winter months. A C.

LODDIGES's, by H. M. DYER, Esq. in 1829. It forms a large bush, and produces a vast profusion of fine blossoms from April to the end of Summer.—The plant is a most attractive ornament to the Greenhouse. Flowers: Calyx coloured, ciliated, Corolla, white, glabrous; tube campanulate, five sided, 1½ inches long; limb of five reflected, cordato-ovate segments. Culture: increased by cuttings. Epacris, from Epi, upon; akros, the top; habitation.

7. *Pultenaea subumbellata*, Decandria Monogynia. Leguminosæ. Seeds of this highly ornamental Greenhouse plant was sent from Van Diemen's Land, by Dr. SCOTT, to the Glasgow Botanic Garden, plants of which blossomed in April, 1833. The flowers are very bright coloured, collected into a somewhat umbellate head, and standing out horizontally, so that on looking down upon the flowers you see nothing but the standards. Vexillum of a bright orange, with a pale oblong spot on the back at the base, surrounded with a deep purple black ring. Alæ, yellow, with a red line. Culture: increased by cuttings. Pultenææ, from W. PULTENEY, M.D. a Botanical author.

Botanical Register. By J. LINDLEY, Esq. Price 4s. coloured.

1. *Lupinus rivularis*, River Lupine. Class, Diadelphia Decandria. Nat. order, Leguminosæ. Inss. Papilionaceæ, D. C. A native of California, whence seeds have been recently sent to the London Horticultural Society. It forms a handsome hardy perennial, flowering in great profusion from May to September. Mr. LINDLEY states, in some respects this is even a better species for gardens than *L. polyphyllus*; for if less stately, it is more gay in its appearance, and a longer flowerer. The diversity of colours in its petals, no doubt, contributes very much to this effect, which is increased by its loose, but not straggling, mode of growth. Flowers: Vexillum white, suffused with pale rose, the lower part spotted with blue, Alæ, violet blue, carina, white with the point of a dark purple. *Lupinus*, from see page 92.

2. *Cactus speciosissimus*, var. *lateritius*. Brick-red hybrid Cactus. Icosandria Monogynia, Cactææ. This most splendid variety was raised by Mr. PRESSLEY, gardener to Walter Boyd, Esq. of Plaistow, in Essex. It approaches *C. Jenkinsonia* in many respects, but has paler and more brick-red petals. It was exhibited at a meeting of the London Horticultural Society on the first day of March, 1832, and was much admired. It merits a place in every collection of Stove plants. At a late meeting of the Horticultural Society, Mr. SHAW, the gardener to Sir Edmund Antrobus, exhibited individuals of *Cactus's*, each of which was literally covered with blossoms; as many as between two and three hundred being found upon a single plant. By judicious management, Mr. SNOW observes, a succession of such specimens may with ease be procured every month in the year. Culture: increased by slips, cuttings, and seeds. Soil: a considerable proportion of leaf mould, mixed with sand and loam; in this, the plant will flourish very freely. *Cactus*, see page 35.

3. *Aster cordifolius*, heart-leaved. Syngenesia Polygamia Superflua. Compositæ. A species common in gardens. It is often confounded with *Aster paniculatus*, from which it is distinguishable by the leaves being much more cordate, and by the flowers being about one-third less; also by its flowering branches having scarcely any true leaves upon them. Flowers: light purple. It blooms in September, grows two or three feet high. Culture: increased by division of roots. Soil: a common garden soil. *Aster*, from *aster*, a star; resemblance in flowers.

4. *Calandrinia speciosa*, shewy. Polyandria Monogynia. Portulacææ.—This handsome hardy annual has been recently sent from Northern California, by Mr. DOUGLAS. Of all the Purslane tribe, this is unquestionably the handsomest. On a hot dry bank or bed, when the sun is shining full upon it, with all its rich crimson blossoms fully expanded, and reposing upon the soft velvety bed of its succulent leaves, it is a most beautiful object. Culture: this beautiful hardy annual produces abundance of seeds, and is readily raised.

Soil: it delights in dry and exposed situations, and flourishes most in scorching weather; but it should have a rich soil, when it will form a patch a foot in diameter. It makes a beautiful rock plant. Flowers in May and June, if sown early, or in September or October if sown later. Calandrinia, from J. L. CALANDRIA, a Genevese Botanist.

5. *Loisa Plœci*. Mr. PLACE's Loisa, Polyadelphia Polyandria, or Polyadelphia Monogynia. Loasæ. It was received some years back into the London Horticultural Society Garden, but lost. It was recently raised in Mr. KNIGHT's Nursery, from seeds sent by Mr. CUMING. If it were not for the unpleasant stings, this would be a valuable hardy annual; extremely unpleasant accidents have arisen from Ladies being stung incautiously with it.—Flowers: yellow, slightly tinged with red; in bloom from June to September. Culture: easily propagated by seeds. It is quite hardy during summer, but should be raised on a hot bed, and planted out afterwards.

The British Flower Garden. By Mr. R. SWEET. Monthly, price 3s. 6d. coloured.

1. *Schizanthus pinnatus*, var. *humilis*. Dwarf Schizanthus, for description, see page 14 of our Magazine. Mr. DON adds that young plants raised in the Autumn, and protected in a pit or frame throughout the winter, and planted out in the open border about the end of April, or beginning of May, will be found to succeed best. [We have taken off-cuttings, or slips, at the end of September, struck them in heat and preserved in a Greenhouse,—such make splendid plants the following year.]

CONDUCTOR.]

2. *Orobis aurantiis*, Orange-flowered Bitter-vetch. Diadelphia Decandria. Leguminosæ. This plant is a native of the western regions of Caucasus, where it was discovered by M. STEVER. It is essentially distinguished from the *Orobis croceus*, of Desfontaines by its smooth leaves, attenuated at both ends, and by the very unequal teeth of its calyx. It has also deeper yellow flowers than *Orobis lutens*. Messrs. WHITLEY, BRAMES, and MILNE, Nurserymen, Fulham, possess plants of *Orobis aurantiis*. The plant is perennial hardy, requires a loamy soil, and may be increased both by parting the roots and by seeds. *Orobis*, from ora, to excite, and Bous, an ox, alluding to its beneficial effects upon oxen.

1. *Calceolària purpurea*, var. *èlegans*. Elegant purple Slipperwort. This very fine variety of Slipperwort was raised by Mr. WHEELER, Nurseryman, Warminster, Wiltshire, from Chilian seeds, received from Mr. CUMING. The plant produces a profusion of flowers, the large spreading panicle, with its profusion of blossoms of various shades of purple, contrasted with the dark green leaves and glossy stem, give a very striking effect. The corolla is generally of a lilac purple, with a very short white tube. The plant is perennial, and does best planted out in the open border during the summer months. Increased by offsets, slips, or seeds. *Calceolària*, from see page 60.

4. *Trifolium uniflorum*, single flowered Trefoil. Diadelphia Decandria Leguminosæ. This elegant little Trefoil is not unlike our native *T. subterraneum*, but is altogether a plant of larger dimensions, and is moreover a perennial. The name *uniflorum* appears not of the best signification, as the flowers are mostly in threes. The plant is quite hardy, and admirably suited for a Rockwork, where its numerous large blossoms, issuing from the bosom of its bright green leaves, make a showy appearance in May. The flowers, wings, pale yellow; Vexillum, lilac. The plant thrives best in a light sandy soil, and is increased by parting the roots. It is grown in the Botanic Garden Chelsea. *Trifolium*, from tres, three; and folium, a leaf.

The July number completes the second volume of this very valuable and useful publication. We hope there will be a considerable accession of purchasers to the third volume.

The Botanic Garden. Monthly, 1s. 6d. large; 1s. small, coloured. Edited by Mr. B. MAUND.

1. *Spiræa bella*, pretty spiræa. Icosandria, Pentagynia. Rosaceæ. A native of Nepal; shrub, introduced in 1818; height, three feet; flowers in June and July. This is a very elegant shrub; its general habit is not much unlike that of the Raspberry, producing long succulent bottom shoots annually. It requires thinning and pruning same as the Raspberry; the flowers are produced upon the side shoots similar to it. Spiræa, from the Greek Speira, signifying a cord, flexile branches; bella, from the Latin, pretty.

2. *Periploca græca*, Grecian periploca; Pentandria Digynia. Asclepiadææ. A native of Syria; deciduous climbing shrub, cultivated in 1597; height, 20 feet; flowers in July and August; colour, brown. It may be propagated by layers, or very readily by cuttings, planted in March. Periploca is derived from the Greek Periploke, signifying an intertwining; habit of the plant.—Its specific name marks its native country.

3. *Aster sibiricus*, Siberian aster; Syngenesia, Superflua. Compositæ. A native of Siberia; hardy perennial, introduced in 1768; height, two feet; flowers in July and August; colour, pale blue. The Aster sibiricus is a valuable species, of low growth, and larger flowers than most others. It may be transplanted at any season; requiring, of course, additional care if removed in summer. Aster, from the Greek Aster, signifying a star; resemblance in flowers. Sibiricus is applied to indicate the native country.

4. *Narcissus interjectus*, great curled-cupped narcissus. Hexandria, Monogynia. Amaryllidææ. A native of S. Europe; perennial; introduced in 1810; it blooms abundantly in April; colour, yellow. The Narcissus interjectus may be planted in any common soil. A cool situation should be preferred.

Loddiges's Botanical Cabinet, 5s. ten plates coloured; 2s. 6d. partly coloured. Edited by Messrs. LODDIGES'S.

1. *Berberis buxifolia*, box-leaved, Hexandria Monogynia. This plant is a native of the Straits of Magellan and other southern parts of America, and has lately been introduced by Captain KING. It forms a low straggling shrub, and flowered in April at Messrs. LODDIGES'S, protected by a cold frame, but in all probability it will prove to be quite hardy enough for our winters.—Flowers, pale yellow. Culture: it may be increased by cuttings or layers, and grows in light loamy soil. Berberis, from Berberys, its Arabic name.

2. *Cyclamen repandum*, Repand (bent back) Cyclamen. Pentandria Monogynia. Primulacææ. This pleasing little plant is a native of Greece, and is said to have been introduced in 1816. It produces its flowers in May, they are of a fine rosy red, and last a considerable time. It occasionally produces seeds, by which alone it can be multiplied. The plant thrives best in a Greenhouse, and must be kept near the glass. The soil should be a rich loam; the dung used to be very old. Cyclamen, from Kycias, circular; form of leaves.

3. *Erica quadrata*, Octandria Monogynia. Ericææ. A native of Cape of Good Hope, introduced in 1829 by Mr. LEE, of Hammernsmith Nursery.—It flowered abundantly in May with Messrs. LODDIGES'S. The flowers are perfectly four square, hence its name, they are very diminutive, but produced abundantly. It requires the usual Greenhouse protection, and may be increased by cuttings. The soil should be peat. Erica, from Ereiko, to break; fragility of branches.

4. *Rhododendron campanulatum*, bell-flowered. Decandria Monogynia.—This very beautiful plant was raised in 1825, from seeds, by Messrs. LODDIGES'S. It is a native of Nepal, and Dr. WALLICH states that it grows in elevated situations, so that he had no doubt it would stand our winters without injury. It has remained perfectly well out of doors for the last two win-

ters, at Messrs. LODDIGES's, Hackney, near London. The young leaves are at first purplish underneath; they then become milk white, and afterwards, when quite hardened, change to a kind of tan colour. It bloomed in April, kept in a cool frame. Flowers: pale rosy purple and white. It increases by layers as well as cuttings. Soil, loam and peat. Few plants are so magnificent as the Rhododendrons; few also are so widely diffused over the Globe, though none have yet been found south of the Equator. Rhododendron, from Rhodon, a rose, and dendron, a tree.

5. *Cyrtanthus spiralis*, spiral-leaved, Hexandria Monogynia. Amaryllideæ. This plant is a native of South Africa, near Algoa Bay. Messrs. LODDIGES's received bulbs of it in 1832, and it flowered in March, 1833, continuing several weeks. Flowers: light red. It requires the protection of a Greenhouse, and may be potted in sandy peat. It has not yet exhibited any signs of increase. *Cyrtanthus*, from *Kyrtos*, curved; *anthos*, a flower.

[The remaining five plants are obliged to be omitted till our next number.]

A Supplement to the Practical Treatise on the Culture of Florist Flowers, containing additional directions and improved modes of cultivating the Auriculas, Polyanthus, Tulip, Ranunculus, Heart's-ease, Carnation, Dahlia, &c. &c. with Catalogues of the newest and most esteemed varieties of each Flower. Dedicated by permission to the Queen, by THOMAS HOGG, Florist, Paddington, near London; p. p. 208; price 7s.—1833. Published and sold by the Author.

The author of this interesting Floral publication has had a great many years' practice in the particular department of Floriculture which the work comprises, and as might justly be calculated upon, the matter it contains is very interesting; and to persons desirous of obtaining information on the culture of Florist flowers, the book will be found useful. The subjects are described in a plain and intelligent manner. The work contains improvements that have resulted from the author's practice and observations since the publication of the Treatise, to which this is a supplement. We recommend the work to our readers. We have extracted an article on the culture of the Heart's-ease for our present number.

On the Culture of Heart's-ease or Violets.

This flower has always been a favourite with the Ladies; its endearing names of "Heart's-ease," "Love in Idleness," "Cull me, sweet," "Three smirking Faces under one Hood," (the two upper petals coiling or covering the three lower,) "Pansy," corrupted from *Pensée*, thought, alluding to keep in mind, or forget me not, have imparted a more than common interest to it. Some say that *Viola* derives its name from its powerful scent "*ex Vi olendi*," which scent is confined to only two or three sorts; others ascribe to it a more poetical origin. These flowers ought to be planted in clumps, or beds, and then the rich mass of bloom, so mixed and so many coloured, produces a very pleasing effect; it comes into flower the end of May, and continues through the summer. The most prevailing colours are plain purple and violet, of many shades; red, brown, white, yellow, &c. as well as purple and violet, variegated with white or yellow, &c. streaked with jet, &c." They like a cool moist situation in the garden, particularly in hot summers, and ought, there-

fore, to be planted, not on raised beds, but on such as are upon a level with the alleys. They produce seed freely, which may be sown early in spring, in cold frames to bring it forward; and where the young plants are sheltered from cold wind and hail storms, till the weather gets warm and settled, when they may be planted in the open garden. They are propagated by dividing the roots, or by cuttings, placed under small hand-glasses in June.

In the following abridged list, many of the varieties are distinguished only by the descriptive title of their colours; these flowers are at present in great request.

Achilles.	Emperor.
Albion.	Fairbairn's Invincible.
Allen's Queen Adelaide.	Fire King.
..... William IV.	Favourite (Thompson's).
..... Prince of Orange.	Five Coloured.
..... Black Prince.	Four Coloured.
..... Duchess of Kent.	Grand Purple.
..... Marginata.	Hopwood's Puss.
..... Hero.	King of the Whites.
..... Lady Howden.	Luna.
..... Apollo.	Lady Essex.
..... Duchess of Richmond.	Louis Philippe.
Bishop of London.	Lord Gambier.
Blue Altaica.	Light Purple coloured.
Boyce's Lady Gifford.	..... laced.
..... Lord Lyndhurst.	Large Light Blue.
..... Sir Walter Scott.	Mottled Altaica.
..... Sir James Mackintosh.	Marshall's Reform.
..... Earl Grey.	Miss Grimstone.
..... Rob Roy.	Miller's George IV.
Brown's Mazeppa, superb yellow.	New Tricolor.
..... Maid of Athens.	Othello.
..... Cupid.	Priam.
Bunney's Queen Adelaide.	Princess Victoria.
..... Earl Grey.	Purple, White, and Yellow.
..... Reform.	....., Blue, and Yellow.
Blotched Yellow.	..... and Bronze.
Blotched Purple and Blue.	..... and Sky Blue.
Blotched Tricolor.	Thunder.
Blotched Purple and White.	Thompsonia.
Burnett's Variegated.	Vulcan.
..... Pale Blue.	Victory.
Cream coloured.	White-eyed Purple.
Corinna.	Wheeler's Marchioness of Bath.
Duchess of Gloucester.	..... Seedling, No. 1.
..... Northumberland.	..... Monarch.
..... Wellington.	Willmer's Redbreast.
Dark Yellow-eyed Purple.	..... Blue Beard.

The greater part of the above-named varieties may be obtained of Mr. Hogg, florist, Paddington, London.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

Can you, or any of your readers, inform me through the medium of your valuable and interesting work, whether I can in any way prevent the pods of my pinks from bursting? This year, nearly every pod has burst. Is it owing

to the soil? By informing me on this subject you will oblige your constant reader,
LUPINUS.

ANSWER.—We hope some of our friends will favour LUPINUS with the desired information. In the meantime, we beg to inform him of the best method we know to adopt with his pinks. Procure a sheep or calf bladder, either may be had for one penny; after being blown up, let it dry a little, then cut it into shreds about one-eighth of an inch broad, and long enough to wrap round the pink pod two or three times. After moistening the bladder shred, wrap it round the pod, about the middle, the shred will adhere to the pod as if glued; it entirely prevents the pod bursting. When the flower bursts forth, the shred may be taken away; this is necessary in cases of flowers to be exhibited in competition, as no such accommodation is allowed by Florists. In taking off the shred, wet it, and it will readily pull off; the above method is far preferable to tying matting, worsted, thread, &c. round the pods, as they often get damaged by tying, loosening, &c. Perhaps the reason of the pods bursting, may be in consequence of the extreme richness of the soil in which they grow, added to a great deal of moisture they may have been supplied with; we know these things encourage the defect. CONDUCTOR.

I shall be glad if you, or any of your correspondents, will inform me in the *Floricultural Cabinet*, how to bloom the following plants, viz. —*Doryanthus excelsa*, *Epidendrum aloifolium*, (*Cymbidium aloifolium*) *Combretum comosum*, *Aristolochia labiosa*. I have grown the above plants for more than two years, and they have not yet bloomed, but are in good health, and now are large plants. They are grown on a back shelf in a pine stove.

JOSEPH TEW, Gardener to Wm. Robins, Esq.

Hagley, Worcestershire, June 13, 1833.

A few hints on the culture of *Ixia's*, *Antholyzas*, *Watsonias*, *Lachenalias*, and *Guernsey Lillies*, either in pots or the open ground, how often to be removed, soil, situation, &c. would be very acceptable. SNOWDROP.

CARNATIONS.—I should be much obliged by your informing me of the cause of, and cure for, Carnations dying off when near bloom. I have just lost several, and a neighbour of mine has been equally unfortunate.

IRIS.

What is the proper culture of the "*Cactus speciosissimus*," as a green house plant, to get it into bloom without artificial heat?—It will be very acceptable to myself, and I doubt not to many of the readers of the *Florist's Magazine* also, if some instructions be given as to the proper supply of water required to green-house plants in general, during winter, particularly the *Geraniaceæ*.

AN AMATEUR.

ANSWERS.

REPLY TO AN AMATEUR RESIDENT AT CAMBERWELL.—I beg to state, that I have cultivated that beautiful and graceful plant, mentioned in his Query, for above three years, and have now a plant not more than two years old, five feet in height, and as many in circumference. My opinion is, that putting the plants indoors on an evening, is the cause of the buds dropping off, as I always leave mine out night and day, as soon as the frosts are over; in the next place, it is probably for want of water; when coming into bloom, they should be plentifully supplied, at least every four-and-twenty hours, and a pan kept under them. I have no doubt, if your Correspondent will adopt this plan, he will find himself rewarded by a splendid show of these delightful flowers.

Bayswater, July 4, 1833.

W. MONTAGUE.

Mercy on us! No less than three Bear's paws at work together in scratching up a poor *Snowdrop*—there is really no withstanding it. I declare they have so battered and bruised me that I shall be long before I bloom again, or raise my drooping head. The owners of the paws must surely have supped together at *Martin Hall!* on acidulous substances, and squeezed the lemon into the inkstand instead of the punch-bowl. As I am too much mauled to make a stand against all my rough antagonists at

once—for "Hercules himself must yield to odds"—let me try my hand at them singly and *seriatim*. I begin, therefore, with the *shortest*, and in *short*, then, *Mr. Short*, I have merely to say to you, with all possible deference and submission to your very superior judgment in these matters, that I conceive every one has a right, without consulting your sapience, to give an opinion and offer any suggestion he may think proper, on the work in question. I have given my suggestions honestly, and you may if you please cut out the leaf that contains them and light your pipe therewith. Your modest request, respecting my name, shall not long be denied—it is, *Galanthus nivalis*, formerly of Chelsea, now of *Snowdrop Cottage, Primrose Hill*. And now that the *Long* and the *Short* of the matter are settled, I shall be exceedingly gratified to see your "something" *shortly*, and hope for the honour of "*Martin Hall!*"—(Heaven save the mark!)—it will be a little more grammatical and profound than your late nothing.—What a *vivida vis animi!* what powerful ratiocination! and then how beautifully expressed (I dare not quote the words,) that selling a shilling work for sixpence would be gaining a loss!

"Poor Gentleman I'm sorry for you,
And pity your upper story."

To an Amateur, who ignorant of the difference between a cabinet and greenhouse, and who, moreover, confesses himself no Gardener, seeing also, that he has more "modesty," "propriety," and greenness than his fellows, I do not mind being civil enough to inform him, that dictation was never for a moment contemplated by me—suggestion was all that was intended. Indeed, I had no idea that the note in question would have been printed, or a few of the rugged points would have been softened down, to prevent the delicate feelings of such fastidious ursine gentry as him and his "twinned brothers," from being shocked "out of all cess."

Mister J. C. H., I advise you in future to "let your reason with your choler question what 'tis you go about," and should you have occasion to pen such another epistle as that in number 5, I make it my "business" to recommend *you, yourself, for your own sake*, to put it, italics and all, into "the latter end of a sea coal fire."

"Utrum horum, mavis accipe."

I have thus Sir very lightly top dressed the above worthy triumvirates, fearing that if I had made the compost stronger, they might grow too luxuriant for your Cabinet.

Yours, &c. SNOWDROP.

In page 113 of the *Cabinet*, I see some remarks by HIS LORDSHIP, on the mode of striking Dahlias from cuttings as given in page 67 by DAFFODIL. Whether, in the remarks HIS LORDSHIP has given, he purposely states an untruth or not, I have not the means of ascertaining, without he attests the fact in some subsequent article. I beg, however, to inform him, that such statement is untrue. I have struck hundreds of Dahlia cuttings, and have invariably cut them thro' CLOSE to the underside of the joint; I wish HIS LORDSHIP to understand me as not meaning any DISTANCE from it, nor thro' the middle of the joint, and of the cuttings I have thus put off, I calculate not more than one in twenty have failed of striking, the root pushing from the edges of the joint. I should be very sorry for any admirer and cultivator of this truly noble splendid flower, to be misled by such wilful or erroneous statements as HIS LORDSHIP has sent forth. It is POSSIBLE for cuttings taken off and cut thro' the stalk at some DISTANCE (say one or two inches) from any joint to strike root, I have not seen many instances of it, but I believe with Dahlias in general that ninety out of every hundred would fail—there is a sort which I have found to increase when so cut, viz. LEVICK's Incomparable, or tipped Dahlia. If HIS LORDSHIP should not possess that Dahlia, and will apply to me, I can give him a plant, or if nearer his residence, I dare say he may get readily supplied from the Gentleman who raised it at Sheffield, in Yorkshire, and then his powers, and astonishing capabilities, of striking Dahlia cuttings where he has no eyes in the soil, may perhaps be successful; but as in the first statement he has made, which I am confident from the results of my own practice is a wilful untruth, so is the latter, if he applies it to all Dahlias.

I think HIS LORDSHIP is correct as to eyes of cuttings sometimes being damaged by an excess of water, but even then, the whole cutting generally dies.

A third untruth is stated, where he says "Now if the eyes of the cuttings are CUT OUT it does not invariably follow that the root will not push again;" does HIS LORDSHIP mean the pushing of a shoot or shoots. If he means the old tuber will push fibres I agree with him; but if the contrary, I deny the correctness of his statement. And now a word or two, as to the eyes or good roots. His LORDSHIP says, "when the eyes cankered away, or were eaten out by insects, "as wire-worms, &c." wet gets into the hollows thus made," most astonishing, ROTS OUT what the insects or canker had eaten out before. I really have not been accustomed to read such logic as this, unless HIS LORDSHIP has given his remarks with a view of exhibiting to the public how many untruths he could pen in the shortest space, upon a subject of Floriculture; I am really at a loss to know why he penned such a piece of rubbish. If HIS LORDSHIP will give me his address, or inform me where I could leave a parcel for him, I would with much pleasure give him a small volume published by an eminent Divine, on truth.

VERITAS.

Regent street, Glasgow, July 4th, 1833.

REMARKS.

ON THE *RANUNCULUS*.—The failure of *Ranunculuses* this season near London, and the difficulty of blooming them well in light soils, has induced me to mention a plan, which I am informed by a French gentleman he has seen in successful practice in the neighbourhood of Paris. The tubers are planted in deep pots filled with very rich compost. These pots are placed in large pans sunk in the ground and kept constantly supplied with water. Another plan has suggested itself to me, but which I have not yet tried—namely, to dig the earth out of a bed two or three feet deep, and brick the bottom and sides; fill up this pit with prepared compost, and keep it constantly supplied with water. Clay would probably answer as well as bricks, and be less expensive. Probably you will give your opinion on the above plan.

SNOWDROP.

I suppose when each of your purchasers who happen to be afflicted with the "*Cacoethes Scribendi*," shall have delivered their opinions respecting your Book, and when each one of these volunteer critics shall have received the just measure of praise or blame, which may seem due to his letter in the opinion of certain other critical sages—I suppose then, it will not be too much to expect, that the space so unworthily occupied by these controversialists will be devoted to the legitimate purposes of the work, and that your little Magazine may be allowed to keep "the even tenor of its way," undisturbed by the dissensions of those goose-quill warriors, who choose "to run their fierce encounters" in your pages. When this shall be the case, and the little work goes on increasing in popular favour, as it cannot fail to do, I trust it will be strong enough to shake off certain Cockney incumbrances which stick like barnacles to a ship's bottom, rendering the trim vessel marvellous unsightly, and prodigiously impeding her sailing (i. e. *sale*). Really, I cannot help hinting to those self satisfied luminaries, who, under absurd nick-names, bestow their tediousness upon us, recording their own achievements, and provoking the record of others equally valuable; those daring experimentalists, who propose to irrigate from milk-pots and certain other domestic vases, the unhappy plants that, growing probably in similar vessels, adorn their windowsills;—I must hint to those gentlemen the propriety of abstaining from appropriating your pages to the publication of such important manipulations; but let them not be lost to the world:—no, no; publish a volume of "*Transactions*," devoted to registering the "three years' experience" of these friends of yours; but pray make it quite "optional" with your readers whether to purchase it or not.—If you publish this letter, (and if you do not, I shall think myself "a very ill-used gentleman,") you can of course protest against my sentiments being taken for yours; and, expressing your gratitude to, and affection for, the whole race of Crocuses, Snowdrops and Daffidownillies, (who, infinitely superior to their namesakes in the garden, are in bloom every month,) lay the blame of inserting this incendiary letter upon your negligent printer.—Very truly yours,

WM. GIFFORD.

1st July, 1833.

REFERENCE TO PLATE.

1. *Cenothera tenella*, var. *Tennifolia*, large purple, Chilian Evening Primrose. A hardy annual of very great beauty, flowering from July to September; the plant grows about nine inches high. The collectors who went out to Chili and the islands of the Pacific with Captain Beechy returned in 1829; Aylmer Bourke Lambert, Esq., of Boyton House, Wiltshire, procured from them, among other things, specimens of another Evening Primrose, the *C. tenella*, var. *Tennifolia*, upon which ripe seeds were found. These being sown produced a plant, which is, as far as gardens are concerned, a very different plant from *C. tenella*. It differs from it in having longer and more channelled leaves, and much larger and far more showy flowers; for while in *C. tenella* the flowers are half hidden by the leaves, in *C. tenella*, var. *tennifolia*, the leaves can scarcely be discovered for the flowers. *Cenethers*, from oinos, come, and thera, a catching acquired smell.

2. *Nierembergia phanicea*, purple flowered. Few plants of this family surpass this one in the beauty and brilliancy of its fine bright rosy purple blossoms, rendering it one of the most valuable acquisitions that has been made to our collections of late years. It is a native of the countries of the Rio de la Plata, and was introduced into this country in 1831. Culture. It will succeed well in the open border, where it should be planted in light vegetable soil; it will continue to blossom from April to November. It readily increases either by seeds or slips. Plants raised from seeds produce the finer flowers, but from cuttings the plants bloom more profusely. It was first named *Salpiglossis integrifolia*, afterwards *Petunia integrifolia*, but is now called *Nierembergia phanicea*. To be had of most of the principal Nurseries. *Nierembergia*, after J. E. NIEREMBERG, a Spanish Jesuit.

3. *Lotus corniculatus*, birds foot Trefoil. Heads few flowered, depressed; stems procumbent; legumes drooping, nearly cylindrical; claw of the standard broad, filaments all dilated under the anthers; stems, several spreading all round, from four to ten inches long; flowers, about three or four in each head, bright yellow, generally streaked with red. Perennial, flowers from May to September. Native of Britain, grows in pastures abundantly. An excellent pasture plant.

4. *Veronica Chamedrys*, Germander, Speedwell; Clusters, many flowered; leaves egg-shaped, sessile, deeply ferrate; stem with two opposite rows of long white hairs. Stems decumbent at the base, marked with two lines of long hairs which change sides between each pair of leaves; leaves wrinkled and hairy, with large serratures; clusters of flowers long, shooting up beyond the stem; flowers large, bright blue, with deeper streaks, externally pale purple. Capsule inversely heart-shaped. Native of Britain, grows on dry banks, under hedges, plantations, open pastures and woods; very common. *Veronica*, the name of a Princess.

MONTHLY FLORICULTURAL CALENDAR FOR AUGUST.

ANNUALS.—Many of the sorts now sown in pots will bloom during autumn, and make a fine show for a greenhouse.

BALSAMS.—See pages 57, 105.

BIENNIALS.—Hardy kinds may still be sown in the open ground for blooming, late next year.

CALCEOLARIAS.—THE HERBACEOUS CLASS.—Offsetts divided and planted in the open borders will bloom well in autumn, or if put in pots, in the greenhouse, from September.

CARNATIONS.—May still be layed. Any struck should be potted off as early as possible.

DAHLIAS.—Cuttings taken off close to the mother branch will root freely if struck in heat. Such will make fine tubers by the end of the year, from which a number of plants may be obtained next spring.

MIGNIONETTE.—Sown about August 12th, will bloom in November and December.—See page 65.

PELARGONIUMS.—Cuttings now struck make fine plants for blooming early next spring.

RIDGE, PRINTER, SHEFFIELD.



Lady Whandille



Lychuis Sylvestris



Mimulus luteus



Calceolaria Maritima

THE
FLORICULTURAL CABINET,

SEPTEMBER 1ST, 1833.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Blëtia Tankervillæ.*

By AN AMATEUR GARDENER.

Having grown the beautiful *Bletia Tankervillæ* for several years, in a manner very superior to what I have ever seen it elsewhere, I herewith send you a short account of my method of treatment, and shall be glad to see it in your truly useful and delightful Flower Magazine.

The plant is most readily increased by offsets taken from the Parent, and is the best mode of having plants for blooming the coming season. The time when I take off offsets is usually the beginning of February; these I plant in pots about six inches diameter, using a strong and highly enriched soil. After potting I place the plants in a hot-bed frame, when I have one in operation, otherwise I place them upon a heated flue, or plunge in the bark bed of a pine-stove. When the plants have been in a hot-bed frame, I take them out as soon as I perceive they have struck root, and place them in the Pine stove, plunging them in the bark bed. During Summer I water them frequently with a mixture of soap-suds and deer's dung. By the end of October the plants will have got well established; I then give them a less quantity of water, and a lower temperature. About the middle of January as many plants as are intended for blooming early in the spring, say April

and May, are re-potted, keeping the balls entire. I put the plants into pots of about nine inches diameter, using the same kind of soil as before. After re-potting, the plants are plunged into a bark pit, or frame, having a brisk bottom heat.

The plants soon throw up very vigorous flower stems producing spikes of flowers from three to four feet high, each spike having from eighteen to twenty-four blossoms. After blooming, the plants are kept for a supply of offsets the following spring.

By having a considerable number of plants, and keeping some in a cool situation, and introducing them into the frame or pine-house, as circumstances require, a succession of this very beautiful flower may be had for several months, and its splendour will amply repay for every attention to its cultivation.

AN AMATEUR GARDENER.

July 6th, 1833.

ARTICLE II.—*On growing the Pink.* By INNOVATOR.

If you consider the following remarks upon growing the Pink worth a place in your Magazine, they are quite at your service.

The beds, where convenient, should be raised to the height of a foot, by boarding above the level of the paths, and four feet wide; in the bottom lay an inch thick of fresh lime, and upon it ram down four inches of fresh horse droppings, and the remainder fill up with the following compost, well mixed, and passed through a coarse sieve. Take of good fresh substantial loam, 16 barrows-full, old hot bed 12 ditto, finely broken oil cake 4 ditto. Having filled and made the bed perfectly level with the foregoing compost, put in the plants in three rows, and fifteen inches distant every way; they should be planted as soon as they have struck, and here they may remain without further care till the middle of February, when the bed will require a top dressing of finely sifted sandy earth. This I prefer to any other, as dung, or such substances, by their loose texture, only serve as a hiding place for earwigs, and however attentive you may be in destroying them, they will spoil many blooms: neither is rotten dung necessary, as manured water will answer better. I need not make any remarks upon tying them, &c., but I should recommend that no plant be suffered to

bear more than four blooms, all others, as well as side buds, should be cut off as soon as they appear. When the flowers begin to expand, they must be shaded from sun and rain, and by supplying them with plenty of rain water poured between the rows, they will continue in full bloom for more than a month. As soon as this is over, you may commence piping: the safest way of doing it is as follows. In a shady place raise a bed of cinder ashes and fresh lime six inches high; upon this place a square wood frame six inches deep, and a little larger than the hand light you intend using; fill this with finely sifted mould and water it till thoroughly soaked, then stick in your cuttings, previously made ready by cutting them just below the second joint, from which you must strip the leaves, and insert them no deeper than half way to the next joint; then place the light firmly over them, and do not remove it for a month; pour a pot of water through the rose upon the top of the glass about once a week, this will keep the earth moist and cool, and cause them to strike sooner. By following the above directions your young growers will have the gratification of seeing many of their best flowers a foot in circumference, particularly if they grow such as Foster's William IV., Young's Marquis of Winchester, Troupe's Matchless, Ford's Victory, &c. &c. Perhaps some of your readers may wish to know why I use lime; it is to prevent earth-worms getting into the bed as they soon destroy its fertility, and, if it were not used in piping, I should find all my cuttings huddled together in some spot and half buried in the mould. If your Correspondent, Mr. Revell, would condescend to try it, I have no doubt but he would be as sure to raise 150 from every 100, as he now is of raising 99 from every 100, if he adopts no other precaution than what he has detailed in your last number.

INNOVATOR.

July 18th, 1833.

P.S. If any further remarks upon Florist's flowers, the result of 15 years' experience, will be of any service, you shall have them at my convenience.

[Note.—Our respected Correspondent will highly oblige us, by forwarding to us any remarks he may please to communicate.—COND.]

ARTICLE III.—*On the Failure of Ranunculuses.* By
the Rev. J. Tyso.

The last season has been the most unpropitious for *Ranunculuses* of any during the last thirty years. I have frequently observed that a cool showery May has been very conducive to the growth of the plants, and has ensured a fine bloom in June. There is a certain state of weather conducive to the generation of roots, another to vegetation, and a third to maturity of plants. Unless these succeed each other, tender plants cannot arrive at perfection. This year the natural order of the season was reversed. We had that state of weather which produces maturity in May, and the state of progressive vegetation in June, so that at the time when *Ranunculuses* should have been taken up they began to vegetate again; and some that remain in the ground will probably bloom about Michaelmas, and produce an increase of roots. I have ascertained from extensive observation and enquiry that the failure has been general, extending to France and even America, though they have grown in very different soils, and were planted at different times, some in January, others in February and March, and some so late as April. The cause of this extensive failure was the hot weather in May, which produced a precocity of the roots, and brought them into a state of rest before they were prepared to send up their blooms, the average of which was only about five per hundred. The only means of preventing a like failure in similar seasons will be, copious waterings and a cool shade. Yet even these will avail but little, when the season is so particularly adverse.

Notwithstanding the unfortunate season for *Ranunculuses*, the seedling roots bloomed well. This was evidently a *trick of youth*, which the old dons refused to play. Those who grew seedlings this year, had peculiar advantage over others. It is the custom of the Royal Berks Horticultural Society to show in "classes," as well as a "stand of nine." At the exhibition which took place at the Town Hall, Wallingford, on June 12th, I obtained the 1st prize dark, 1st prize rose, 1st prize yellow by seedlings, and the 2nd and 3rd seedling prizes; as also the 1st of the "stand of nine," in which were seven of my own seedlings, and two Scotch.

I believe Mr. GROOM would have had the first prize at the Metropolitan Society, had he entered his flowers in time to shew. I

state these things to encourage Florists and Amateurs to cultivate Seedlings, because the vigour of their youth will always ensure an abundant bloom.

Mr. MILES of Hilperton, gives a lucid and interesting account of his method of cultivating Ranunculuses at page 81, and adds with an air of self complacency, "I have *never failed* to have a good bloom." If he has not failed *this year*, I hope he will favour us with his method of treatment in May last.

J. TYSO.

Wallingford, Berks, July 27th, 1833.

[NOTE.—Mr. TYSO will much oblige us by his communications.—COND.]

ARTICLE IV.—*On the Growth and Culture of Tulips.*

By W. B. P.

The plan I have pursued for the last twenty years is simple, and one I have always found to answer my most sanguine expectations except through misfortune by frost, hail, &c.; against such unforeseen circumstances it is almost impossible to guard. I always plant my Tulips about the 8th or 12th of November, $3\frac{1}{2}$ to 4 inches deep, on a bed raised by side boards about a foot from the surface; which in our heavy cold soil gives room for the superfluous water to drain off. I always plant them in the soil taken from the Ranunculus bed, which Ranunculus bed I generally manure at the latter part of the year with cow dung, and throw the Tulip bed on the Ranunculus bed, which is manured again in the same manner, with an exception in the year 1832; that season I manured my Ranunculuses with rape dust. I took off the soil as before, and I never remember having had so fine a bloom; this at once proves the superiority of the manure. I generally take out a spade depth. Some Florists will tell you manure will cause them to run into colour; this I grant will be the case if due care be not taken to use the manure sufficiently old and well neutralized, and deprived of its poisonous qualities, as acids, salts of iron, and all metallic substances, by the action of sun and air; with such care they will never run, as I have tried maiden soil, soil slightly manured, and the above soil from the Ranunculus bed, manured with rape dust, and I never witnessed so strong and regular a bloom. I must also beg to differ from an old grower respecting the existence of

those small worms which are not wire worms, but are generated in the bulb from disease or injury by frost or hail storms, and not from a disposition of adhering to good flowers more than bad, but owing to the finer sorts being more tender and delicate, consequently more liable to be attacked by disease, which may also be occasioned by a portion of fresh manure coming into immediate contact with the bulb; yet I believe frost, in nine cases out of ten, is the prevailing cause of disease, as one season I had nearly the whole of my bed injured by it more or less, and the whole of the injured bulbs were attacked by those small worms, and it was two years before I could recover them; many were completely destroyed in the ground, and others went off after being taken up. I this season had a bed laying east and west, which were all more or less injured by a severe hail storm in the latter part of April; whilst another north and south was not injured at all, though only a walk separated the two beds; the former on being taken up, were many of them nearly wholly destroyed by hundreds of those marauders, and I have not the least shadow of a doubt of their being attacked in consequence of their getting diseased by one or both of the above causes; and as a preventative I should recommend a net about half inch mesh, to be thrown over the stage about the latter part of April, as we have for the last three years had severe storms of hail about this time, and suffer it to remain until it is necessary to put on the main covering; this will not injure the flowers or weaken them, but may prevent a severe loss. I should also recommend TULIPA to use a rich maiden loamy soil, the soil from his Ranunculus bed, or if he does not grow them, to use the soil from his Carnation pots. They may be grown in the loom one year, and the second year add one sixth dung from the Cucumber bed, and one sixth coarse sand.

W. B. P.

Hull, June 13th, 1833.

P. S.—I shall always feel a pleasure in contributing and giving any answers to queries so far as I am enabled to do, and I hope the above remarks will be useful to your Correspondent TULIPA, but I have business to attend to, consequently much of my time is taken up. I intend next month, if possible, giving an account of my treatment of the Ranunculus this season, with the result.

[NOTE.—We shall be grateful for the promised favour of our respected Correspondent.—CONDUCTOR.]

ARTICLE V.—*On the Fuchsia gracilis, cultivated in the open border.* By Mr. SHARMAN, Syston Park.

That lovely plant, the *Fuchsia gracilis*, stands the Winter well with me at this place under the following mode of treatment.—As the plant merits universal cultivation, I transmit the mode I practice for the encouragement of other persons to give the plant a trial.

Early in Spring I turned out strong plants with balls entire into the open borders, which were well enriched with manure or leaf soil; these bloomed most abundantly that season. In the Autumn, I cut the entire heads down close to the ground, and immediately covered the roots six inches thick with leaf mould, and let it extend some distance from the centre of each plant.—About the middle of April following, I removed the leaf mould, and the plants soon began to push shoots; when they had got about six inches high, I thinned out the shoots so as to leave only three or four of the strongest to each plant; these got five feet high last Summer, and produced thousands of flowers.

Syston Park, Feb. 8, 1833.

JOHN SHARMAN.

PART II.

EXTRACTS.

Loddiges's Botanical Cabinet, 5s. ten plates coloured; 2s. 6d. partly coloured. Edited by Messrs. LODDIGES's.

CONCLUDED FROM OUR LAST.

6. *Andromeda hypnoides*, Decandria Monogynia. A native of Canada, as well as Lapland and Siberia. It is a minute but elegant plant, growing among moss, to which it very much assimilates itself. It flowers in April and May. It is somewhat difficult of cultivation, succeeding best potted in peat earth, covered with a bell glass and kept in a shady place. It may be increased by cuttings. *Andromeda*, from the Virgin *Andromeda*.

7. *Oxylobium Pultenæ*, Pultenæ like, Decandria Monogynia. This is a native of New Holland. Messrs. LODDIGES's received seeds of it in 1829, and it flowered last May, being a foot high. It forms a neat little greenhouse shrub, with rigid branches. Flowers, bright yellow and red. The leaves vary

greatly in their insertions on some of the shoots, being in fours, on others in threes, and on others scattered. Increased by cuttings. Soil, sandy peat. *Oxylobium*, (see page 134.)

8. *Hemanthus pemiceus*, Hexandria Monogynia. This plant has been long in cultivation in this country. It is a native of the Cape of Good Hope, and will live in the Greenhouse, but appears to thrive best if kept in a Stove. It flowers in May and June. Colour, red. The roots will bear dividing occasionally. Soil: should be loam and sandy peat. *Hemanthus*, from Haima, blood; and *anthos*, a flower, referring to colour.

9. *Gladiolus Watsonius*. Watson's; Triandria Monogynia, Iridæ. A native of the Cape of Good Hope. It grows about a foot high, and flowers in May; when planted in the open border at the front of a Stove or Greenhouse, it will endure the Winters in such a situation. Flowers: orange, streaked with red. Although our climate is so different from that whence this beautiful plant is derived, it nevertheless grows and flowers here in great luxuriance. Culture: it increases by offsets, and the soil should be a sandy peat. *Gladiolus*, from *Gladius*, a sword; referring to the leaves.

10. *Canna pallida*, pale flowered, Monandria Monogynia. Cannæ. This plant was figured in Mr. Roscoe's publication on the Scitamineæ. He describes it as a native of the West Indies. Messrs. Loddiges's received theirs from Mr. DEPPE, at Xalapa. It blooms in May and June, but like all other species of this genus, if repotted after flowering, it will doubtless bloom again immediately, and thus will bloom any season of the year. Culture: increased either by seeds or separating the plant. Soil: a rich loam, and to be kept in the Stove. *Canna*, from *canna*, a cane or mat, referring to stem and leaves.

Plants figured in the following Periodicals for August:—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Calceolaria crenatiflora*, Crenate flowered Slipper Wort. Class, Dianthia. Order, Monogynia. Nat. Order, Scrophularinæ. Synonyms, *Calceolaria anomala*; *Calceolaria pendula*. Blossoms, yellow with brown spots.—There is no species of this beautiful genus which forms so striking an object in the Greenhouse as this. How far it will bear cultivation in the open air, we have yet to ascertain. I can see no reason whatever for the specific distinction between *Calceolaria crenatiflora* and *Calceolaria pendula*, which is attempted to be drawn in SWEET's British Flower Garden. The chief distinction stated is the difference of the number of the crenatures in the lower lip, and the flowers being pendulous or suberect. The former character I find to vary continually in the flowers, even on the same corymb; and the latter seems to me to depend solely on the degree of unnatural luxuriance produced by cultivation. I have both plants from Mr. Low, who first raised them from seeds gathered in Chiloe by Mr. ANDERSON, and who furnished the plant figured as *Calceolaria pendula*, in the British Flower Garden, and I cannot see a shade of difference between them. Graham. It is a splendid species, growing one foot and a half high, and flowers very profusely. *Calceolaria*, (see page 107.)

2. *Salpiglossis linearis*. Linear leaved, Didynamia Angiospermia. Solanæ. Synonyms, *Nierembergia intermedia*. Seeds of this plant, which is exceedingly pretty, and very well deserving of cultivation, were received by Mr. NEILL, from Mr. TWEEDIE, at Buenos Ayres, in 1832, and the first specimen brought into flower in the Stove, at Cannon Mills, in the end of September. It seemed to be about to flower very freely, but probably, on account of the season, all the buds dropped off excepting one, which perfected its blo-

soms and seeds. In April, it flowered much more freely. Flower, corolla, (nine lines long, and nine across) funnel-shaped, limb rich purple, especially when first expanded, darker inwards, and still further towards the throat dotted with purple on a yellow ground, paler on the outside, throat yellow. The habit of the plant is wholly that of *Nierembergia*; the flower in shape and structure precisely that of *Salpiglossis integrifolia* of Hooker, *Nierembergia phoenicea* of Don. Culture: it is raised from seeds, and strikes very readily by cuttings, and will probably thrive well in a dry light greenhouse. Graham. *Salpiglossis*, from *Salpigæ*, a tube; and *glossa*, a tongue.

3. *Epacris heteronema*, varying stemmed, Pentandria Monogynia. Epacrideæ. This pretty species of *Epacris* was discovered by LABILLARDIERE, in Van Diemen's Land; but it is not confined to that country: Mr. A. CUNNINGHAM found it in moist, rocky situations in the Blue Mountains of New Holland, whence he introduced it to the Royal Gardens at Kew, in 1823. It flowers in May. Corolla: pure white, and when contrasted with the deep purplish red anthers, has a most pleasing appearance. Culture: it requires a greenhouse, and to be potted in sandy peat. It strikes from cuttings, in sand. *Epacris*, see page 136.

4. *Platylobium obtusangulum*. Blunt-leaved. Flat Pea. Diadelphia Decandria. Leguminosæ. For the possession of this beautiful plant, the Glasgow Botanic Garden is indebted to Dr. SCOTT, who sent the seeds from Van Diemen's Land. These have flourished, and the plants have been treated as hardy inmates of the greenhouse, where they blossom in May. The species may be only a variety of *P. triangulare*. But this has a much more straggling habit, and longer branches, frequently throwing out new shoots from the axils of the leaves; the old leaves have much more obtuse angles, and the young ones are not angular at all; the flowers are considerably larger, and the lobes of the calyx particularly so. Flowers large, in pairs from the axils of the leaves. Standard, inside, of a bright orange colour, with a red ray in the centre; outside red, with a broad grey brown cloud at the edge; wings, deep orange red. Keel of two whitish petals, deep orange towards the extremity. Culture: requires a greenhouse, and to be potted in sandy peat.—Increased by seeds, or cuttings struck in sand. *Platylobium*, from *Platys*, broad, and *lobus*, pod.

5. *Platylobium Murrayanum*. Mr. Murray's *Platylobium*. Diadelphia, Decandria. Leguminosæ. This plant likewise, as well as *P. obtusangulum*, was received from Dr. SCOTT, from Van Diemen's Land, at the Glasgow Botanic Garden; and Mr. MURRAY, the able and zealous Curator of that establishment, at once recognized it as a species quite distinct both from the subject of the preceding plant, and from *P. triangulare* of Dr. SIMS. The specific name has been given as bearing Mr. Murray's name. The plant bears a great number of flowers, which expand their vivid petals during the day, closing as the evening approaches. Flowers: the colour very similar to the *Platylobium obtusangulum*, only smaller in all its parts. Culture: as the other species.

6. *Eucalyptus amygdalina*. Almond-leaved. Icosandria Monogynia. Myrtaceæ. Synonyms. *Metrosideros salicifolia*. With us a rather slender shrub, having pendulous branches. It is a native of Van Diemen's Land, and flowered at the Glasgow Botanic Garden this year, when trained against the wall. Flowers, in axillary five to eight (or more) flowered corymbs. Stamens numerous, white, longer than the cupula. Culture: sandy loam, increased by cuttings. *Eucalyptus*, from *Eu*, well; and *kalypto*, to cover; referring to the calyx lid.

7. *Pleurothallis prolifera*. Proliferous, Gynandria Monandria. Orchideæ. Our collections are indebted for the possession of this very remarkable orchideous plant, to the Hon. and Rev. WM. HERBERT, who received it from shady rocks at Boto Fogo, near Rio Janeiro. It flowers in June, and requires the same treatment as the other tropical parasites of the same family. In general structure the present species bears a great similarity with *P. saurocephalus*, which inhabits the same country. Flowers nearly erect. Leaflets or sepals of the calyx also erect; deep blackish purple, within more inclined to red.—Petals erect; of a deep rose colour, pale at the margin. Lip erect, of a dark purple brown. *Pleurothallis*, from *Pleura*, side; and *thalleo*, to flower.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s.; plain,
2s. 3d.

1. *Schizanthus retusus*, blunt lipped. Decandria Monogynia. Solanææ. For the introduction of this showy annual, we are indebted to Dr. GILLIES, by whom it was discovered on the Chilian Andes; and from seeds communicated by him to the late Mr. BARCLAY: the plant was first raised in the garden at Bury Hill, in 1831. Flowers, large and showy, of a rich uniform purple lake, with its upper lip of a rich orange yellow, marked with dark brown spots. Culture: a light fresh earth, not too rich, will be found to suit it best, and if kept in the greenhouse, requires a free admission of air and light. It is thought to be only a variety of *S. GRAHAMII*. *Schizanthus*, see p. 14.

2. *Agrostemma pyrenæica*. Pyrenean Rose Campion. This pretty little plant from the Western Pyrenees is small in its growth, very smooth and glaucous leaves, and admirably suited for a rock work. Flowers, of a pale rose colour, very numerous, rising about three inches high. It is a hardy perennial, requires to be grown in sandy peat. *Agrostemma*, from *agros*, a field, *stemma*, a crown; the same as the latin *coronaria*, literally meaning a rustic crown, from the flowers of some species of this genus having formed part of the rustic garlands among the ancient Greeks. D. DON.

3. *Lupinus mutabilis*, var. *Cruckshanksii*; Mr. Cruckshank's Lupine. Diadelphica, Decandria, Leguminosæ. This plant is only biennial, but assumes an arborescent habit, and if kept in the Conservatory will continue to flourish for several years. Flowers, large and showy, in whorls of from five to seven flowers, wings a fine blue, keel, pale purple, Vexillum, orange. The plant was discovered by Mr. CRUCKSHANKS, not far from Pasco, on the Peruvian Andes, near the limit of perpetual snow. Grown in most of the London Nurseries. *Lupinus*, see page 92.

4. *Tropæolum Majus*, var. *atrosanguineum*, dark red, Indian crees (or nastertium). An annual plant of great beauty. Its large dark red blossoms, of a velvety hue, render it a most desirable acquisition to the flower border. It is usually more dwarf than the common kind, and will thrive in any soil. Easily increased by cuttings, and probably by seeds. *Tropæolum*, a trophy; referring to leaf and flower.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany, in the University of London. 4s. coloured, 3s. plain.

1. *Passiflora phanicea*, crimson Passion flower. Monadelphia Pentandria. Passiflorææ. A very splendid acquisition, for which we are indebted to the Right Hon. the Countess of BRIDGEWATER, in whose stove at Ashbridge it flowered in September, 1832. It is nearly allied to *P. alata* and *quadrangularis*, from which it differs in having only two glands at the upper end of the leaf stalk. It is also much more brilliantly coloured than either of those well known species. The stem is quadrangular. The leaves are large, bright green, about six inches long. The flowers are produced singly, from the axillæ of the leaves. The petals are, in the inside, of a rich deep scarlet; on the outside a deep violet, with a white streak along the middle. It is a most desirable species. Culture: increased by cuttings. Soil: rich mould. *Passiflora*, from *Flos*, flower; and *passio*, passion; flower appendages.

2. *Eriogonum biennis*, var. *grandiflora*. Large flowered biennial evening Primrose. Octandria Monogynia. *Eriogonum* synonyms; *E. grandiflora*; *E. suaveolens*; *E. muricata*. This plant is not uncommon in gardens; it is one of the handsomest of all biennials, and as easily managed as the common *Eriogonum biennis* itself. Flowers, large, fine yellow. Mr. LINDLEY adds, the seeds should be sown at Midsummer, and the plants so obtained should

remain in their seed-bed till the next year, when they will flower. It is a bad plan to transplant them, as it prevents their blooming well; and it is unnecessary, for if they are thinned when young, they will require no further care. *Eriotheca*, (see page 37.)

3. *Calandrinia arenaria*. Sand Calandrinia, Polyandria Monogynia. Portulacæ. An inconspicuous annual, very common in sandy places near Valparaiso, whence seeds were brought by Mr. HUGH CUMING. It flowered last year in the garden of the Horticultural Society. Flowers: rosy purple, with a small yellow eye. The plant is hardy, and readily increased by the little shining black seeds, which are produced in abundance. Calandrinia, (see page 137.)

4. *Opuntia aurantiaca*. Orange coloured Indian Fig. Icosandria Monogynia. Cactæ. A native of Chili, whence it was originally sent to this country, in 1824, by Mr. NGENT. It has also been brought home by Dr. GILLIES, whose unpublished *Cactus aurantiacus* it appears to be. The plant is a branched dark green bush, consisting of joints six or seven inches long, and an inch or three quarters of an inch wide in the broadest part, nearly round at their base, but perceptibly flattened towards the point. The flowers are of a clear bright yellow colour, with a column of white stamens in their centre. Culture. The treatment is the same as other dry stove plants. It is a free grower, and readily multiplied by its jointed branches. *Opuntia*, so called from having been found wild in the country of the Opuntii, a Grecian people.

An interesting fact relating to the common European *Opuntia* is mentioned by M. DE CANDOLLE. "Among the practical consequences," he observes, "that result from the facility with which Cacti strike from cuttings, there is one which deserves to be noticed, on account of its importance: it is, the manner in which the *Opuntia* is employed to fertilize the old lavas at the foot of Etna. As soon as a fissure is perceived, a branch or joint of an *Opuntia* is stuck in; the latter pushes out roots, which are nourished by the rain that collects round them, or by whatever dust or remains of organic matter may have collected into a little soil; these roots once developed, insinuate themselves into the most minute crevices, expand, and finally break up the lava into mere fragments. *Opuntias* treated in this manner produce a great deal of fruit, which is sold as a refreshing food through all the towns of Sicily."

5. *Rubus rôridus*. Icosandria, Polygynia. Rosacæ. This rare species flowered in the garden of A. B. LAMBERT, Esq., Boyton House, Wilts, in the Autumn of 1832. It is a native of Madagascar, and strikingly different from all the known species of simple leaved brambles, in its finely cut stipules and bractæ, which are covered over with numerous little transparent green glands, giving all the parts that surround the petals an appearance of being sprinkled with green dew. It is probable the plant will require a greenhouse. It may easily be increased by layers. *Rubus*, from the Celtic word *rub*, signifying red.

6. *Málva umbellata*, umbel flowered Mallow. Monodelphia, Polyandria, Malvacæ. This plant is a native of Mexico, and although cultivated many years ago in the Royal Gardens at Madrid, it had never found its way to our collections until introduced from its native country by Mr. LAMBERT in 1826, has hitherto been treated as a hot-house plant, for it is apt to suffer from the damp of a greenhouse in winter. It is rather a coarse-looking plant; but its many elegant scarlet blossoms compensate for its less graceful habit. *Malva*, from *Malasso*, to soften; its emollient qualities.

The Botanic Garden. Monthly, 1s. 6d. large; 1s. small coloured.

Edited by Mr. B. MAUND.

1. *Lithospermum purpurea-cæruleum*, purple and blue, gromwell. Pentandria, Monogynia. Boraginæ. A native of England; perennial; inhabits chalky soil; height one foot; flowers from April to June. This is one amongst the prettiest native plants of which England can boast. Its changeable hue

and the brightness of its fine blue tints when fully expanded, render it particularly attractive. Its seeds are singularly hard, glossy, and grey, like polished marble. It grows in mountainous and woody pastures in England; rare. *Lithospermum* from the Greek *lithos*, a stone; and *sperma*, a seed; hardness of the seeds.

2. *Tetragonolobus siliquosus*, square podded, winged pea. *Diadelphia*, *Decandria*. *Leguminosæ*. A native of south Europe, perennial; introduced in 1683; flowers in July and August, colour yellow. Plant it in a dry situation; divide in spring only, when it begins to vegetate; sow seeds in April, in rich soil, and a warm situation. *Tetragonolobus* four, *gonia*, angle, *lobos*, pod. *Siliquosus*, alludes to the seed vessel forming a *silique*, that is, a long dry pod.

3. *Gazania rigens*, rigid gazania. *Syngenesia*, *Frustranea*. *Compositæ*. A native of the Cape of Good Hope; perennial, introduced in 1755; height six inches; flowers from June to August; colour orange. Whilst in flower, slip off some of the offsets from its undermost parts. Plant them under a hand-glass, in a cool border, or in preference, on a hot-bed. When rooted, pot them in sandy compost, protect in a cold frame during winter, and turn into the borders in May. In the direct rays of the sun its delightfully brilliant golden flowers shine most conspicuously. *Gazania*, from *Gaza*, riches; splendour of flowers. *Rigens*, from the Latin, hard or stiff; intended to mark the rigidity of its foliage.

4. *Nierembergia phænicea*, (see plate 8, and page 144.)

The Botanical Cabinet, 5s., ten plates coloured; 2s. 6d. partly coloured. Edited by Messrs. Loddiges's.

1. *Hesperis tristis*, sad flowered, *Tetradynamia*, *Siliquosa*. *Cruciferae*. This plant is a native of Germany and Switzerland. It will grow in any good garden soil either in a pot or border. Colour: yellow, with buff stripes. Culture: it is necessary to raise it from seeds, as it requires renewing often, *Hesperis*, from *Hesperos*, evening; the flowers being more fragrant at that time.

2. *Hyacinthus amethystinus*, amethyst coloured, *Hexandria*, *Monogynia*. *Asphodeleæ*. This pleasing little plant is a native of the South of Europe: flowers in April and May. Colour: light blue. It should be potted in sandy loam, and may be increased occasionally by offsets. *Hyacinthus*, a boy killed by *Zephyrus*.

3. *Chorizema spartioides*, *Decandria*, *Monogynia*. *Leguminosæ*. A native of New Holland. Messrs. Loddiges's raised it from seeds in 1832, and it flowered in abundance the following spring. The plants were not more than two or three inches high. The flowers are large, and splendid in colour. Colour: the standard is yellow, and the wings are a fine pink. It should be potted in sandy peat earth, and kept in the greenhouse; it will probably, like others of the same genus, strike by cuttings. *Chorizema*, from *Choros*, dance; *zema*, drink.

4. *Elichrysium filiforme*, *Syngenesia*, *Superflua*. *Compositæ*. This is a native of the Cape of Good Hope; flowers in May. Colour: white. It may be propagated by cuttings freely, and should be potted in sandy peat earth, and preserved in an airy greenhouse. *Elichrysium*, from *Helios*, sun; gold blossoms.

5. *Orobus aureus*, golden flowered. *Diadelphia*, *Decandria*. *Leguminosæ*. A native of the northern parts of Europe; it flowers in abundance in May. Colour: buff. The root may sometimes be separated for increase, although seeds are by far the more preferable way: it is quite hardy, and will grow in any good garden soil. *Orobus*, from *Oro*, to excite; *bous*, an ox; nourishing food.

6. *Cattleya labiata*, dark lipped. *Gynandria*, *Monandria*. *Orchideæ*. This superb plant is a native of Brazil, where it was first discovered and sent home

by Mr. SWAINSON. It requires the stove, and usually flowers in the latter part of summer. Colour: each flower is variegated with lilac, crimson, yellow, and white. It will now and then admit of separation, although it multiplies but slowly; the soil should be sandy peat, with moss and a good proportion of small pieces of broken pots. Great care is requisite to keep the wood-lice from it, or these destructive vermin will absolutely destroy it. *Cattleya*, from W. CATTLEY, a member of the London Horticultural Society.

7. *Sarracenia flava*, yellow. Polyandria Monogynia. Sarraceniacæ. A native of Carolina and Florida, growing in swamps. It must be kept in the greenhouse, in a small pan of water. The soil should be sandy peat; it will sometimes separate at the root. Colour: greenish yellow. *Sarracenia*, from Dr. SARRAZIN, a French physician.

8. *Gnidio imberbis*, beardless—scaled. Octandria, Monogynia. Thymelææ. This is a native of the Cape of Good Hope; it flowers most part of the summer. Like most of this family, the flowers are fragrant in the night, but scarcely so at all in the day time. Colour: very pale green. It requires the greenhouse, and should be potted in sandy peat; it may be readily increased by cuttings. *Gnidia*, ancient name of the laurel.

9. *Solanum crispum*, curled. Pentandria, Monogynia. Solanææ. A native of Chili. Colour: lilac. Flowers in May and June. It is supposed to be hardy enough to bear our winters. It grows fast in almost any soil, and will increase by cuttings without difficulty. *Solanum*, from Solor, to comfort; soothes by stupefying.

10. *Rosa Banksiæ lutea*, Lady Banks's, yellow flowered. Icosandria, Polygynia. Rosaceæ. This is a very pretty climbing rose, and it usually flowers earlier than most of the roses; and, with the shelter and support of a wall, will flourish almost in any soil or situation. *Rosa*, from Rhodd, red, Celt; colour of flower.

On the Cultivation of the Auricula. By Mr. THOMAS HOGG, Florist, Paddington, London.

The Auricula, one of the early and favorite flowers of Spring, still continues to be very generally cultivated, and many new varieties of it are produced every year from seed, though it takes some time before they get abroad: the florist who has been lucky enough to raise a fine flower, is seldom inclined to part with any of it, till he has been enabled to increase it to ten or a dozen plants, which are generally sold out at one appointed time; for unless he can make something by it, at the beginning, to remunerate him for his trouble, he will have little chance of doing it afterwards. Some plants throw out offsets freely, and are easily propagated, while others do it very slowly; so that it often takes four or five years of careful culture to raise even six plants of some kinds. This is one reason why Lee's Colonel Taylor and Hedges's Britannia still continue dear and scarce; they produce so few offsets; added to which, plants of Colonel Taylor seldom survive the fifth or six year. I am not aware that any other flower has had half the pains and trouble bestowed upon it as the Auricula, in regard to compost. Experiment after experiment has been tried, and the combination and commixture of every known soil and manure have been made a hundred different ways; nor do I know that the result of any one experiment, after all, has been conclusive and satisfactory. There seems a capriciousness in the Auricula, at times, with regard to its nourishment, for which no one can account; for in the same kind of soil, in which it has thriven and flourished two or three years, it will, if the same compost be long continued, often languish and decay, without any apparent cause. This has made me less particular about both the precise quantities and qualities of the different ingredients, commonly used; nor do I find it necessary to mete them out with that exact proportion which my late brother florist, EMMERTON, used to impress upon me, at the time I assisted him in the writing and compilation of his Treatise. This was the beginning or dawn

of my Auricula fancy, eighteen years ago; and I have cultivated them with tolerable success ever since, though in a situation by no means suited to them, being too much inclosed and confined in the midst of coal smoke, and in the want of a free and brisker circulation of pure air.

ISAAC EMMERTON AND HIS COMPOST, &c.

The ingredients which he recommended, for the most part, are of a nature too filthy and offensive for general adoption, as well as too tedious in preparation, and very prejudicial, if used prematurely; but nothing could ever shake his belief in their excellence, power, and efficacy. EMMERTON used to say, "My father used them, and I used them after him, and made improvements upon them; and nobody grew Auriculas better; and it is but justice to add, that the Auriculas which the florists about Barnet, Totteridge, and Finchley exhibited at that time, KENNEY and EMMERTON in particular, have not been surpassed, if equalled, by those of any florist of the present day. They were remarkable for their bold trusses, broad expanded pips of brilliant colours, strong stems, and large fleshy foliage; indisputable proofs of good culture.

The consistency of the mould ought to be, in some degree, regulated according to the nature of the situation in which they are grown. If the place is low and damp, the compost should be light, free, and open, and not too retentive of moisture; it should likewise not be compressed too closely round the plants in the pots, that, after rain or watering, it may dry again in a reasonable time. The only part of the year in which they can receive and discharge any great supply of either, with advantage, is the latter part of February and March, when they are in a quick growing state; and in April, when in flower. If the roots are kept too wet, and damp, long together, at other times, the foliage soon shews it, which changes to a pale sickly green: but, in elevated situations, where the air is brisk, and the moisture soon dries up, and where the plants require to be watered more frequently, the compost may be of a closer body, embracing a larger portion of loam in its composition; and the plants themselves may be more firmly potted, according to the instructions given by EMMERTON, as suited to the high ground of Finchley and Barnet, or other open and exposed situations. Auriculas have been often suffered to remain on the ground, in those places, exposed to the weather, from May till Michaelmas, without sustaining injury; the only precaution taken, was keeping the worms out of the pots, by setting them on tiles, slates, or coal ashes; but this I know, that if mine were left so exposed, situated as I am, and the Summer should turn out wet, I might expect to find half of them rotten by that time; so widely different is the mode of treatment that ought to be observed in the two situations referred to.

Though EMMERTON certainly grew his Auriculas well at Barnet, and though he used full one fourth of strong yellow loam with his hot manures of sugar-scum, night soil, blood, &c.; yet, notwithstanding his vain boasting, they were never long-lived with him; he was sending for fresh plants from the country almost every year, more or less, to keep up his stock; he never sold any at that time; he might, perhaps, exchange or give one away occasionally, but he grew them entirely to gratify his own fancy. When he was obliged to leave his nursery at Barnet, in consequence of his having libelled the parson of his parish, a magistrate withal, by hanging him in effigy on a tree in his garden, near the public road; and for which offence he was indicted, and suffered a year's imprisonment in the King's Bench. He, after this, removed to Paddington, and occupied a small nursery and flower-garden near me; where he continued for a while to grow Auriculas, along with other plants, for sale; but he was far from being successful with them; he complained, by way of excuse, that he had not got his compost in right order, and that the London air did not seem to suit them; he at last gave it up, as he was neither likely to gain either credit or advantage by the pursuit; and sent a few of his best flowers to be taken care of by Mr. MOORE, of Finchley.

EMMERTON, after he had published his treatise, was looked on as a Professor, qualified to give instructions in the art and mystery of Auricula growing; and was invited, by some of the new beginners, to superintend, occa-

sionally, the management of their flowers, that they might benefit by witnessing his practical skill and dexterity in mixing compost, in trimming the root of the plants, and in fresh potting them, as well as in thinning out the young formed pips, and flattening and arranging them in the truss, when fully expanded. He considered himself a perfect adept in this respect; and fully entitled to his fee, of a dinner and a glass of grog. His discourses, and the recital of his feats in *Auricula* growing, and of the prizes he had won, were, it is true, sometimes rather tedious and fatiguing to those who had heard them before; but to his pupils and young florists, who wished to profit by them, the theme and the subject were, I believe, always pleasing, and listened to with attention.

THE UNLUCKY PUPIL.

There was a person residing at Newington, belonging to the India House, whom EMMERTON had imbued and inoculated with the *Auricula* fancy, and who entered into it with spirit, and purchased at least one hundred plants of the best sorts then in cultivation. He had likewise got enrolled a member of a Flower Society in that neighbourhood, and felt almost confident, under EMMERTON's auspices and tuition, of winning the first prize, the silver cup; but unlooked-for accidents will often mar the best-laid projects, and occasion disappointment. Good compost was a particular object of solicitude with both of them; and as EMMERTON contended, that without bullock's blood and goose-dung they would stand no chance; now, as the latter was a species of manure very difficult to be obtained in that quarter, he persuaded his pupil to commission some country waggoner out of Sussex to bring him, at Midsummer, two geese and a gander; which, according to EMMERTON's calculation, would produce dung enough by Christmas as to last him two years, when they would be fat and fit to kill, and well adapted for good fare, wherewith to treat his friends at that joyous season. This project was soon put in execution; the geese were brought to town, and cooped up in a corner of his small garden, which might be ten yards long, by five wide. Every thing was going on smoothly; the plants grew and the dung accumulated; only the man's wife complained of the filthy smell, arising from the heated and fermenting dung, than which nothing can be more offensive; but EMMERTON promised soon to remedy that evil, by covering it with loam; notwithstanding, as the dung increased, and was stirred up with the blood, the fermentation and stench increased too, and became so intolerable, that the women living at the two adjoining houses joined their complaints with hers, and abused him whenever he made his appearance; and they all insisted upon its being instantly removed, threatening him with their immediate vengeance, in case of refusal. EMMERTON, finding the storm gathering in right earnest, judged it prudent to decamp; telling them, that the London ladies were too fine nosed by half; but he never dared to repeat his visits after.

This was only a prelude to the vexation which the gentleman had to experience himself. One day, when absent at his office, the door of the coop was by some means left open, and the geese, finding themselves at liberty, waddled about the garden unnoticed; and having been deprived of grass and green meat so long, fell upon the *Auriculas* in the frame, pecked, bit, and pulled them out of the pots, and trod over, and spoiled them so completely, that they were of little worth afterwards. One of the geese was killed, and eat at Michaelmas; and would, no doubt, have met this fate, whether the said offence and trespass had been committed or not. The two others were stolen a day or two after. This sad mishap deprived the owner at once of all hopes of the silver cup, and inflicted upon poor EMMERTON the certain loss also of many a good dinner on a Sunday; when, unfortunately for him, a dinner was an object of no trifling importance.

DIFFICULTY OF OBTAINING YELLOW LOAM IN LONDON.

From the inclosure of waste and common lands, and from the prohibition of the Lords of the Manors of others not yet enclosed, as Old Oak Common, and Wimbledon, there is great difficulty in procuring pure native loam round

London. I, as well as many other florists and nurserymen, have been lately under the necessity of sending for it as far as Waltham Flats, and Wanstead Common, at considerable expense. This loam is of a yellow cast, of too free and unsubstantial a texture for Carnations or Tulips; yet very suitable for Auriculas, and many other plants. It seems free from any sour or deleterious quality, arising either from stagnant water, or rust of iron.

In order to preserve our Auriculas in a sound healthy condition, I have judged it requisite, of late years, to make some alteration in the compost, and to form it of more simple and less powerful ingredients. The effect has been, that they have flowered equally as well, whilst we have preserved our plants better. We no longer have recourse to sugar-bakers' scum, blood from the slaughter-house, pigeons' dung, and the like; for, unless great caution be taken, there is more harm than good to be apprehended from the use of them. Interest and prudence alike suggested the propriety of discontinuing the further application of them, and of endangering no longer a collection of more than two thousand plants, which we keep on sale, of all the best varieties in cultivation. There is this advantage arising from Auriculas being grown in moderately manured soil, that they are more easily kept in a healthy state, are less affected by the weather, and less liable to disease; they are, also, less sensible of change of place, when sold and transplanted into other soils. Only conceive, for a moment, what the effect would be, of turning a fat stall-fed ox into a barren pasture; or of restricting a London Alderman to the plain and frugal diet of a poor citizen.

Experience has taught those florists, who are in the habit of keeping strong plants of Auriculas to exhibit for prizes, and of forcing them forward, as they are coming into bloom, in extremely rich and highly stimulating compost, to cause them to throw up bold strong trusses, that they never can depend on the same flowers for the succeeding year; for vegetation, over excited, must decline afterwards; and those plants, if any opportunity offer, they generally dispose of, with the recommendation attached to them, of their having won a prize; and select others, to prepare and train in like manner for the next year's contest.

I have frequently received some of those prize-taking flowers from the country, but they have very seldom thriven well; they could not bear their roots to be shaken from the mould, and to be transplanted into a different soil. I would always decline purchasing such in future, if I knew it. Vegetable economy, as well as animal, are both subject to certain laws of Nature, that cannot be transgressed with impunity; and our treatment of plants ought always to be conformable thereto. A plain and simple mode of culture, as regards all plants, provided they are found to thrive and flower well in using it, is always to be preferred, and ought to be pursued, as being the easiest, cheapest, and the best. To copy after Nature, is one of the best and unerring rules that a gardener or florist can go by, when he is once made acquainted with the habits of any plant, and the soil and situation in which it thrives best.

Strong stimulative manures, however beneficially they may act for the time, in producing large flowers, and vivid colours, too frequently leave the plants afterwards in a state of exhaustion, if not of premature and gradual decay. By forcing them so much, the juices are vitiated, and the constitution impaired; for we all know the injurious, if not fatal effects, that opium, laudanum, brandy, and even wine, taken in excess, produce upon the human body.

Mr. BAILEY, of the Clapton Nursery, some years ago, produced, at the Islington Flower Show, as fine a plant of Lee's Colonel Taylor, and in as fine flower, as ever was exhibited perhaps in England; and which he sold, the same day, to Mr. BROOKS, of Ball's Pond Nursery, for the sum of five guineas; but this plant, having been forced in the manner described above, began to decline after it had been fresh potted in other compost, and never lived to flower again.

We have, of late years, used the following mixture:—one barrow of rich yellow loam, or fresh dug earth, from some meadow, or pasture land, or common, with the turf, well rotten; one barrow of leaf mould; one ditto of well decomposed horse or frame dung; one ditto of cow-dung, two years old at least; and one peck of river-sand, not sea-sand.

This simple mixture, which is easily prepared, and within every one's reach, I can recommend, as a suitable and sufficiently fertile compost, always to be depended on for keeping the plants healthy, and in a thriving state.

For strong plants, intended for exhibition, I would add to the same compost, as a stimulant, a barrowful of well decayed night soil, with the application of liquid manure, once or twice, before you top dress in February; and twice more in March, not oftener. A peck of sheep dung, with the same quantity of horse-droppings, put into a large tub of water, stirred up frequently, and left to ferment a week or two before it is used, may be applied with good effect and perfect safety.

A portion of light sandy peat earth, generally to be met with on the tops of barren heaths, or moors, though not easily obtained everywhere, may be added, as a safe and useful ingredient; particularly for plants kept in low and damp situations, where light potting, and light compost, are found to answer best.

By way of change, we make use of the following composition:—two barrows of Wanstead loam, with the turfy part decayed; one ditto of leaf mould; one ditto of cow dung; one ditto of old frame or horse dung; a half ditto of old night soil; a half ditto of sheep-dung; and two pecks of Thames sand; with a top-dressing of one quarter loam and three quarters sheep and cow dung, rotted, and mixed together in one heap; and manure-water as before, with the intent, as florists express it, to throw in colour, and to encourage the growth of the umbel or truss, then shooting up to flower.

WINTER.

In the three Winter months, from the 21st of November to the 21st of February, Auriculas do not require much of our care, beyond watering them occasionally; plucking off the dead leaves, and covering them with mats or a little coarse hay litter during severe frost; and this covering ought more particularly to be given them in February, because their trusses then begin to appear, which, if frozen hard, will shew the ill effects of it in the bloom. They want very little water in the Winter; and seem to get through it best, when kept rather dry than otherwise, in December and January. Early in February, if the weather should then happen to be mild and open, you may give them a day's gentle rain, or, at least, rain sufficient to reach their roots, at the bottom of the pots; and this may be repeated, when necessary, through the month. You may now give them the manured water twice, and do the same again in March, allowing a week between each watering. About the middle of the month, or as soon after as the weather permits, top-dress with some of your best and richest compost; taking care, in the first place, to remove as much of the earth as you can from the top of the pots, without injury to the roots. The liquid manure and the top-dressing will add fresh life and vigour to the plants, and accelerate their growth. They now require all the air you can give them.

If any plants require shifting into larger pots, this is the proper time for doing it.

MARCH.

To insure a good bloom, much depends upon the care you take of them in March. Let them receive no check whatever, either from want of covering or want of water. Let the lights be off all day, if the weather is in any degree favourable; and let the plants receive all the soft and gentle rains that fall, until the pips open; protect them, however, from cold sleet and snow, and cold cutting winds. By the middle of March, the flower-stalks will have shot up, and the flower-buds will begin to grow; and as they are the tenderest part, and most liable to injury from frost, which often prevails by night, more or less, at this season of the year, it is advisable, nay more, it is highly necessary, to give them additional covering, to prevent their being chilled and nipped by it; neither expose them too hastily to the sun, if it should shine, before the frost shall have disappeared; and let the same precaution be used in April.

To prevent the stalks being drawn up and weakened, so that they cannot

support the trusses, let them have all the air possible. Thus, having nothing to retard or check their growth, they cannot fail to go on well, and produce large trusses of rich bloom.

APRIL.

By the end of the first or second week in April, the flowers will begin to expand, and shew their colours; when the lights must be kept on, by day and night, to prevent them from getting washed by the rain, or tarnished by the sun; either of which would deaden their brilliancy, and spoil their beauty. Air must be given by raising the lights at the back of the frames; and thin mats thrown over them, to keep out the hot sun, during the middle part of the day. Let the frames be shut close in the evening, and warm covering continued a while longer in case of frost. Now is the time to thin out the crowded pips from the centre of the trusses, which will give more room to the rest to grow, and to expand themselves, and lie flat, and come more nearly of a size. When the plants are fully blown, let the best and strongest of them be taken out of the frames, and be set on boards, sand, or coal ashes, behind a low fence, or private hedge, and covered with large hand glasses. Here they will remain cool, and shaded, and preserve their blossoms fresh for three weeks. Cover them with a mat at night.

As soon as the flowers begin to fade, remove them to a north or north-east aspect, where they will have to remain till November: when you should be provided with the conveniency of placing them on a raised platform, and of sheltering them from the sun and rain with boards or shutters, hung on hinges, to let up and down, as occasion requires; our plants are never set on the damp open ground, Summer or Autumn. Do not forget in June, to pluck off the dying petals, which, if left on, are injurious to their forming the seed. You may likewise nip off the whole of the pips on young plants, just above the pedicels, to strengthen and increase their growth. Many persons, who are careless about the seed, serve them all in this way.

POTTING.

As to the fittest time for shifting the plants into fresh compost, it matters very little in my opinion, whether it be done in the beginning of June, or two months later. From experience, I have found either time suitable; provided you can meet with a few days of clouded sky and moist atmosphere. The plants, after flowering, relapse into inactivity, and grow very little during the hot Summer months. If you pot early, you ought, also, to top-dress the plants with fresh compost in September; because the mould in the pots, by that time, must be greatly impoverished by watering.

Remove all large offsets from the plants some time in March, because they grow quickest in the Spring.—*Hogg's Supplement.*

[The above extract is inserted to give our readers an additional opportunity of judging of what we consider a very interesting and useful publication.—CONDUCTOR.]

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

METHOD OF CULTIVATING TIGRIDIA PAVONIA.—Will you, or any of your correspondents, be kind enough to inform me of the best method of cultivating that beautiful plant, *Tigridia pavonia*—whether it is best raised in a slight hot-bed or in the open ground, and whether it is advisable to grow it in

pot. I have for some time endeavoured to have a bed of them blooming at the same time, but I have generally been unsuccessful. By inserting this in your valuable pages, you will greatly oblige
M. S. Y.

Hampstead, July 26th, 1833.

FORCING ROSES.—You will particularly oblige one of your readers if you will communicate any information upon the best method of forcing early Roses, so as to have them in bloom immediately after Christmas, or any time in the month of January, or even early in February. What is desired is to have the forced Roses plentiful and fine of the kind—not poor, weak flowers.

July 26th.

Rosa.

ON THE WISTARIA CONSEQUANA.—Being a subscriber to your excellent work, named the *Floricultural Cabinet*, I make bold to address these few lines to you, hoping you will not esteem me taking a liberty with you in requiring the mode of cultivation of a plant I cannot obtain flowers from. The *Glycine sinensis*, or *Wistaria Consequana*, is the plant I mean, having had it a long time and not being able to flower it. Should you be so kind as to insert a treatise on its cultivation, I should feel extremely obliged.
X. Y. Z.

July 27th, 1833.

ON THE CULTURE OF CARNATIONS.—I should feel extremely obliged if you, or any of your numerous correspondents, would favour me, by means of your valuable pages, with a little information on the culture of Carnations, particularly if by any treatment I could prevent the colours from running. This year I have been at considerable expense and trouble with them, but I have had the misfortune to loose them all, at least with respect to the natural colours. I should also be glad to have some information respecting the soil, &c. I have been advised to plant them out when struck in a rich soil, previous to putting them in the bed where they are to remain. Do you think this a good plan? By obtaining this information for me, you will very much oblige your's, &c.
TULIP.

July 11th, 1833.

Will Mr. MENZIES be so kind as to inform me how long the shoots of the *Azalea indica* should be when put into the greenhouse to harden before going out of doors? And I should be additionally and most highly obliged by a description and treatment of the Ghent Azaleas. If Mr. MENZIES will give an early attention to the above requests, it will be very gratefully esteemed by
A CONSTANT READER.

What are the best plants to grow in a sharp gravel of a serpentine or granite nature, under trees, which lies on a declivity, and is very dry?

R. R.

ANSWERS.

Although "An Amateur" from Camberwell has been very ably answered by Mr. MORAQUE respecting the management of that beautiful plant the *Fuchsia*, I think it is in my power to afford him a little additional information, having been very successful in raising it from cuttings, and having my plants generally admired for the elegance of their form and the profusion of blossoms they display. The method I invariably adopt is, as soon as they have dropped all their leaves to cut back each branch about four inches, and remove the plants into a spare room, gradually diminishing the supply of water until about October; after which, I suffer them to remain all the winter without any, or, at most, a little at the top of the pot about once a fortnight. In the following spring, as soon as I perceive them beginning to shoot, I shift them into fresh mould, which should be light and rich with manure, and give them a little water about once a week, until they show flower-buds, after which time I supply them liberally both at top and in the pans. In respect to their being placed out of doors, I do not find that they will succeed in that way before the latter end of June, for one cold night, or even day, will cause the buds to drop off; but if the weather prove settled warm, they may be turned out of the pot or planted in the border; or, to prevent accidents, the pot

with the plant in it may be plunged into the earth, and it will succeed very well, though the blossoms will not last so long as when the plant is kept indoors. Great attention must be paid to keep them well watered.

Your correspondent "Snowdrop" has asked a question in the last number which is highly interesting to me, as I am particularly attached to the culture of bulbous-rooted plants, and have a list descriptive of several very beautiful species of *Ixia*'s, *Gladiolus*'s, *Babiana*'s, and *Lachenalias*. I would, therefore, be greatly obliged if you could obtain for me, from any of your correspondents information as to the time and place when and where they may be procured; also the usual prices, that I may regulate my orders accordingly; as I cannot get any of them where I reside, and have unsuccessfully commissioned friends to purchase them for me in town.

I have now a few words to say respecting my letter inserted in your July number. I am so sincere an admirer of, and well-wisher to, your publication, that I should be extremely sorry to give offence to any of your contributors, particularly to one who has proved so valuable a correspondent as "Snowdrop;" and, therefore, beg to apologise for my hasty and rather petulant animadversions on his note, occasioned, I can assure you, entirely by my erroneously imagining that he wished to engross the pages of the *Cabinet* exclusively for subjects of interest to himself, without consulting the taste or wishes of other subscribers; and to depreciate the work by bringing the plates in comparison with others of six or seven times the price. He was clever enough to discover that I am no gardeuer, but his sneer at my modesty was not quite so piquant as he imagined, since it proved the highest compliment he could pay me (being a female), to observe, that he allowed me to possess some share of that best attribute of my sex!

I trust he will be satisfied with this apology, and let all contention cease between him and

AN AMATEUR,

Or (according to his suggestion)

SYLVIA GREEN.

In reply to your correspondent "Iris," page 141, where he is enquiring the reason of Carnations drooping and dying when near bloom, I beg to inform him that it is caused by growing them too strong in the winter situation. The layers should be planted in light, but poor soil; for if they are planted in a rich compost in winter, they make a large quantity of roots, and become very strong, throwing up stems for bloom; which causes them to grow luxuriant, the stems become very pithy, and the sap cannot properly circulate. They then turn to a whitish green, and assume an unhealthy appearance, and when near blooming they droop, as if in want of water. I am persuaded, that if "Iris" will take and cut through the stems, he will see that they are full of pith, and quite dry, being destitute of sap. If "Iris" wishes to grow for competition, I should recommend him to grow one part of his plants in a very rich compost, in order to get them of a very high colour. In doing this, he must always expect to find some that run to one colour; but if he grows one or two of each kind on a bed that is of a poorish, but light soil, and if they should chance to run by being grown too rich, and in that case if any die by being so treated, he will see that he has saved the other which was grown on poor soil. Such is the way extensive cultivators of the Carnation do, or they would soon lose the greater part of their best sorts. It is to be regretted that those kinds that are of a high colour, are most subject to run—such as Cartwright's Rainbow, pink bizarre; Walmsley's William the Fourth, scarlet bizarre; Taylor's Festival, scarlet flake; Bellerophon, purple flake; Tyso's Princess Victoria, rose flake; and Martin's Prince George of Cumberland, red picotee. Such as the above, and all that are of a high colour, similar to those named, should not be grown in too rich a soil; but at some future period I intend sending you an article on the cultivation of the Carnation.

Pitsmoor, August 3d.

JOHN REVELL.

[NOTE.—We shall be much obliged by Mr. REVELL's promised article, at an early convenience.—CONDUCTOR.]

REMARKS.

I hope you received the Supplement, which you were kind enough to apply for; I sent it, as directed, through your publishers. I wish you would correct, through the medium of your Magazine, an error or misnomer in it in the list of Dahlias, for the sake of Mr. Inwood, a very worthy man and well-known Dahlia grower at Putney Heath. The flower I allude to is Inwood's Defiance, a rosy crimson. It ought to be "Inwood's Springfield Rival," in opposition to Mr. Widnall's Perfection, which it greatly resembles, and is said by some to be fully equal to, if not superior. For my own part, I have not yet seen either; but I received a few days ago two fine strong plants of the Rival from Mr. Inwood, at 10s. 6d. each. I wish I could compliment some other growers in the same way for the plants they have sent to me. The Rival was raised from seed by Mr. Line, gardener at Springfield, near Bromley, in Kent, and was purchased in the seed-bed by Mr. Inwood for £5. The fame of it soon spread, and several Dahlia growers went to view it, and wished to buy the root, but it was then sold. Among the rest, a person of the name of Glenny was very desirous to purchase it, and offered seven guineas for it; but the answer he received was, that his offer came too late, and that it was sold. Notwithstanding this, Glenny returned in a few days after, in company with Mr. Hopwood, of Twickenham, and advanced his bidding to £10, observing that as Inwood had paid no deposit, he was not legally entitled to claim it. Line then informed Inwood of what had passed, saying, that he had no wish to run from his bargain; but he hoped that Inwood would advance something more. Inwood, in consequence of this complied with his request, and got the root for seven guineas, being the amount of Glenny's first offer. I have given these particular that you may judge, the "Springfield Rival" is no common flower, and as such I trust it will not disappoint the expectations of the florist.

THOMAS HOGG.

Paddington, June 10th, 1833.

NEW METROPOLITAN FLORICULTURAL SOCIETY.—I beg to hand you for your use and perusal, the prospectus of this Society and their printed circular, announcing their first Tulip Show, as well as the circular of an intended exhibition of Dahlias, open to every one, not yet issued. The transactions of this Society, I hope, are destined to form an interesting and important feature in the pages of the "*Florist's Magazine*." Wishing you success in your new undertaking.

Cairo.

London, June 3rd, 1833.

METROPOLITAN SOCIETY OF FLORISTS, &c.

The object of the above Society is to promote the science of Floriculture, by awarding Prizes for the best productions, not only by the Members themselves at the Society's periodical meetings, but also at open shows, called occasionally in different parts of the country.

In pursuance of the latter determination an open meeting will be held at Mr. Botham's Salt Hill, on Wednesday, 18th September, 1833, when a series of prizes will be awarded for the best, the 2d, 3d, 4th, 5th, 6th, 7th, 8th, 9th, and 10th stand of Dahlias, containing twelve blooms, and not two of a sort. The principal Prize being a handsome Silzer Cup, and the succeeding Prizes being other pieces of plate appropriate to the occasion.

Six other prizes will also be awarded for the best six seedlings that shall be produced.

The entrance money for each stand to be five shillings till the 1st of June, seven shillings and sixpence till the 1st of August, and ten shillings after that time; and no person to open more than one stand. Entrance for each seedling two shillings and sixpence, and all persons may show as many seedlings as they please to enter. The flowers in stands must be entered, and in the tent erected for the purpose in the gardens, by twelve; and placed for the censors, at one; and any flower or flowers arriving after the clock has struck twelve will be inevitably disqualified from being shown.

Persons desirous of entering their names to show flowers may apply to any member of the Committee, or to Mr. Botham, Salt Hill, and at the next en-

suing meeting of the Committee, the name, if approved, will be entered accordingly: communications on any subject connected with the meeting may be addressed in the same way.

I have been much gratified in looking over the four numbers of your *Florist's Magazine*, a very cheap and commendable work, because it places the study of Floriculture within every one's reach. I beg to inform you, that the first public exhibition of flowers in the London Horticultural Society's Gardens was held on the 20th of May last. The day was fine and inviting, and the company most fashionable and numerous. The great display of flowering shrubs, such as Rhododendrons, Azaleas, &c., of greenhouse plants, as Geraniums, &c., and of flowers grown in the open borders, as Pæonies, &c., was most splendid and attractive. The show of fruits, as Grapes, Peaches, Melons, Cucumbers, &c., was equally good, and seemed to give general satisfaction. Above four thousand plants of Dahlias alone have been distributed this Spring among the Members; which, I hope, was only a genteel way of getting rid of them, to make room for better; for I saw very few there last year which I considered fine, or that were to my taste, being chiefly old kinds. I do not wish to alarm you, who have been one of the Society's old correspondents; but you must know, that a pretended literateur, an anonymous writer, in the day of Sams, the King's bookseller, in St. James's-street, has had the impudence to obtrude upon the public sundry silly remarks and strictures, reprehending the conduct of the Council, in which he threatens, that if they do not alter it, and adopt his views and profit by his hints; which means, that they should confine themselves in future to the culture of trees, shrubs, fruits, and vegetable, and leave floriculture to him and his associates of a new society,—he will make their grounds at Chiswick a "splendid desert" and deserted garden. This said person is also supposed to have written the long nonsensical review of "Hogg's Supplement on Florist's Flowers;" and to have presided as chairman at a Tulip Show, which was held last month at Hampton, in compliment to the Queen, whose patronage has been accorded to it, on condition of its taking place there, but whose meetings have been hitherto always held in some tavern, either in Gray's Inn-lane, Cornhill, or Billingsgate. I was not a little surprised the other day in looking over our list of new-made members, to find his name enrolled as a Fellow of the Horticultural Society.

AN OLD F. H. S.

London, June 8th, 1833.

If gardeners were literary men, which without disparagement it must be confessed in general they are not, I should raise my voice against "Snow-drop's" proposal of applying the pruning knife; but as they are in general more conversant with the spade than the pen, they ought to be thankful to him for his suggestion to lop off the straggling shoots of their literary plants. It would save a deal of rigmarole, and their communications would be of equal value if expressed in a few words. A little trimming and correction would have been very beneficial to the communications of "T. K. SHORT," "An Amateur," and "J. C. H.," in which are to be found bad grammar, misquotation, and an abundant supply of unnecessary acid matter. These letters prove the necessity of a corrective pen, far more than any argument their authors have used against it.

IRIS.

July 1st, 1833.

[NOTE.—However properly the remarks of our correspondent may apply as to the incorrectness of style or expression, in the communications under consideration, we inserted them verbatim as sent us; and we think it right to add, that not one was from a practical gardener;—so that, as far as the three communications in question are concerned, they contain no "defects" of a practical gardener. In fact, as far as any thing ever sent us by such persons enables us to judge, nothing has come to hand that in the least degree merits reproach. If there has been a deficiency of style or expression, we have uniformly found good common sense, and every thing directed the nearest way to illustrate the subject under consideration. It is certain that a great majority of clever practical gardeners have not had the opportunity of ac-

quiring a literary education, in the fullest sense of the word; yet in the rank of society they hold, we challenge a comparison with any other class, as to intelligence and industry, and they are by no means ignorant of every thing else but practical gardening. In confirmation of this statement, we could easily point out many gardeners, and also a number of their *literary* productions inserted in gardening publications.—CONDUCTOR.]

Your book on Floriculture seems likely to supply a great want. I hope you will confine it exclusively to that subject. I wish to ask you about the Heart's-ease—how is it cultivated? how are the varieties obtained and continued, especially the large dark blue? I wish you would give us a treatise on it.—I think your plate of plants should be arranged on some system, and be made illustrative of some article in the book. What do I as a florist care about Brook-lime? Suppose your last plate had consisted of several varieties of the *Calceolaria*: we should then have had a tolerable notion of that species and its principal varieties; and so of other flowers from time to time:—or of the various classes of the *Chrysanthemum*—as, for instance, one of the Quilled, one of the *Ranunculus* flowered, &c. &c. This would have given us a notion of the distinctions which florists make in their plants, and have completed the subject in some degree. Or of the *Auricula*, or the *Polyanthus*, in the same way:—or of the *Tulip*, shewing also the various distinctions which florists make in Bizarres, Flakes, &c. &c. A few good explanatory plates upon this principle would, I think, be new and very useful, if accompanied by a few illustrative notes.

AN AMATEUR.

[Our object is to meet the wishes of our respected correspondent, and to accomplish all satisfactorily to our readers, our utmost efforts shall be directed to the purpose.—CONDUCTOR.]

REFERENCES TO PLATES.

1. *Revell's Lady Wharncliffe*. Pink. This very superior variety was raised by Mr. JOHN REVELL, florist, Pitsmoor, Sheffield, in 1831. In 1832, it first bloomed, and was judged by very eminent florists to be the best Pink, in cultivation, of its class. The drawing was taken this season, but the flower was then in an imperfect state, not being more than half its usual size. It is of the purest white, and the dark colour is of the richest dark crimson. Its colours far exceed any other Pink. The petals are very broad, and well formed. The pods never burst prematurely. It is a very free bloomer. For culture, see page 101. We are glad to learn that the very worthy person who raised it has now one hundred young plants, and such may be obtained by applying to Mr. REVELL—(see this month's Cover.)

2. *Lychnis sylvestris*. Red Campion, Wood Lychnis. Flowers diæcious; petals cleft, crowned with four teeth; capsule one celled, roundish; leaves egg-shaped, acute; stem from one to two feet high, slightly clammy; panicle terminal, many flowered; petals thin, of a fine rose-colour. Perennial: flowers in May and June; grows in woods, hedges, and shady waste places; common.

3. *Calceolaria Menziana*. This most superb variety was raised from seed by Mr. JOHN MENZIES, the meritorious and industrious gardener to CHRISTOPHER RAWSON, Esq., Hope House, near Halifax, Yorkshire. We hesitate not to say, that no colouring can near display the splendour and richness of the flower. The profusion of its blossoms, with the fulgent richness of their colour, renders it infinitely superior to every other kind come under our notice. We have named it in compliment to the very worthy gardener who raised it.

4. *Mimulus variegatus*. Variegated flowered; monkey flower. The drawing was taken from a plant in the very splendid collection of plants at Earl FITZWILLIAM's, Wentworth House, Yorkshire. It is a very pretty species. A native of Chile, lately introduced into France. It thrives the best if the pot containing the plant be placed in a pan of water. It bears seeds freely, and being probably not long lived, it is requisite to renew it frequently. It delights in a light, rich, loamy soil.

MONTHLY FLORICULTURAL CALENDAR FOR SEPTEMBER.

Annual flower seeds, as *Clakia*, *Collinsia*, *Schizanthuses*, Ten-Week Stocks, &c., now sown in pots and kept in a cool frame or greenhouse during Winter, will be suitable for planting out in open borders next April. Such plants bloom early and fine, and their flowering season is generally closing when Spring sown plants are coming into bloom.

Carnation layers, if struck root, should immediately be potted off.

China Rose cuttings now strike very freely; buds may still be put in successfully.

Mignonette may now be sown in pots, to bloom in Winter.

Pelargoniums, cuttings of, may now be put off; plants from such will bloom in May.

Pinks, pipings of, if struck, may be taken off and planted in the situations intended for blooming in next season. See page 101, and present Number, for the culture of Pinks.

Plants of Herbaceous *Calceolarias* should now be divided, taking off offsets and planting them in small pots. For suitable soil, see the May number of the "Cabinet."

Verbena Melindris (*chamædrifolia*.) Runners of this plant should now be taken off, planting them in small pots, and placing them in a shady situation. It should be attended to as early in the month as convenient.

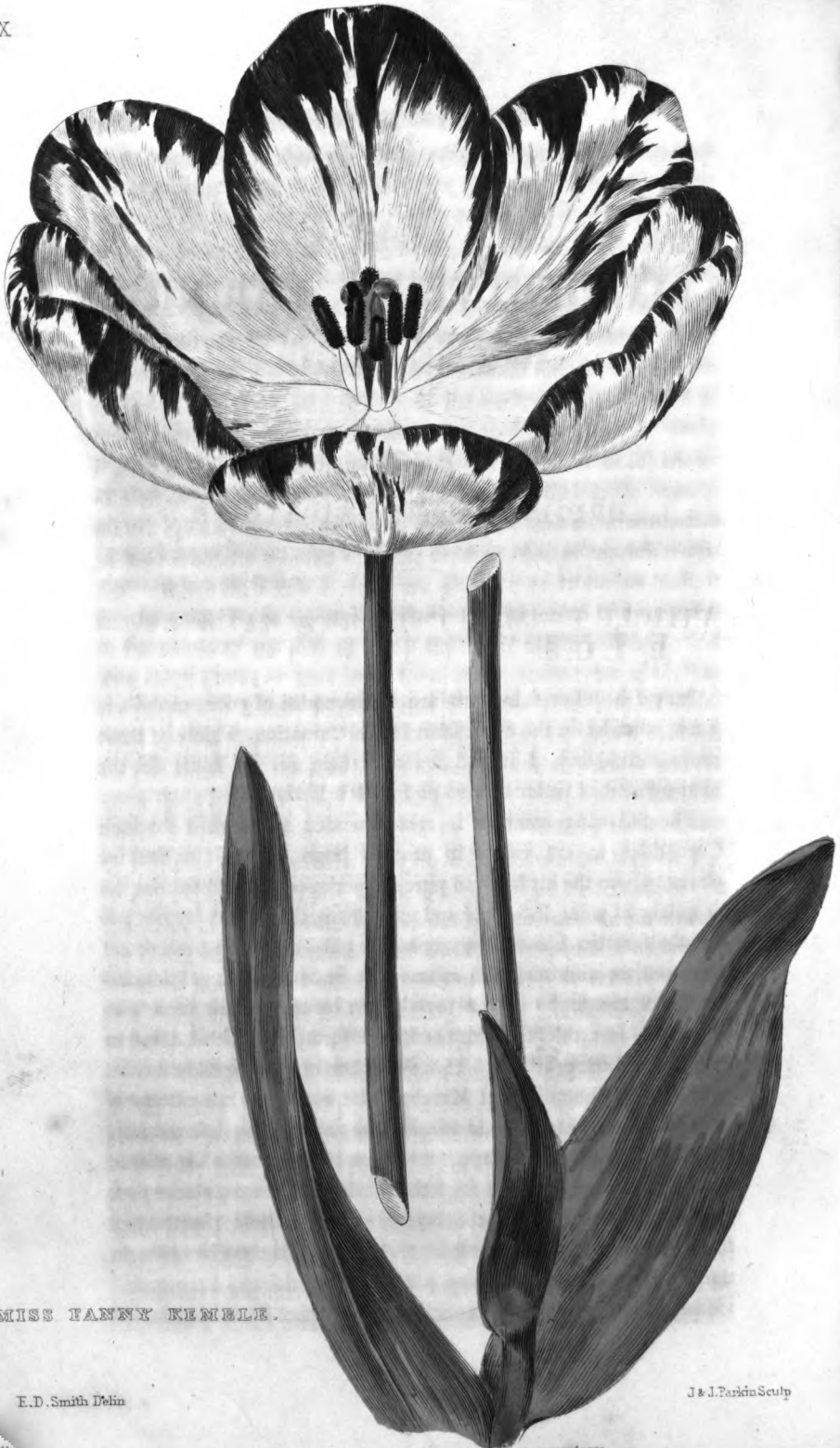
Plants of Chinese *Chrysanthemums* should be repotted if necessary; for if done later, the blossoms will be small. Use the richest soil.

When *Petunias*, *Heliotropiums*, *Salvias*, *Pelargoniums* (*Geraniums*), &c. have been grown in open borders, and it is desirable to have bushy plants for the same purpose the next year, it is now the proper time to take off slips, and insert a number in a pot; afterwards place them in a hot bed frame, or other situation having the command of heat. When struck root, they may be placed in a greenhouse or cool frame to preserve them from frost during winter. When divided, and planted out the ensuing May in open borders of rich soil, the plants will be stocky, and bloom profusely.

Tigridia pavonia roots may generally be taken up about the end of the month.

Greenhouse plants will generally require to be taken in by the end of the month. If allowed to remain out much longer, the foliage will often turn brown from the effects of cold air, &c.

Plants of *Pentstemons* should be divided by taking off offsets, or increased by striking slips. They should be struck in heat.



MISS FANNY KEMBLE.

E.D. Smith Delin

J & J. Parkin Sculp

E.D. Smith Delin

Engraved for the Floricultural Cabinet, Published Oct. 1st 1833.

THE
FLORICULTURAL CABINET,

OCTOBER 1st, 1833.

PART I.
ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Cultivation of the Carnation.*—
By T. G. S.

May I be allowed to introduce to the notice of your subscribers a few remarks on the cultivation of the Carnation, which, if these prove satisfactory, I intend to send them several hints on the management of various Stage or Florist's Flowers.

The following compost is recommended to be used for such Carnations as are grown in or near large towns—(in country places, where the air is more pure, experience has pointed out the propriety of using less dung and more loam, the sand as before:)—One-half rotten horse dung, one year old—one-third fresh sound loamy earth, and one-sixth coarse sea or river sand. These ingredients are to be mixed together in Autumn, laid in a heap about two feet thick, in an open exposure, and turned three or four times during winter. The operation of potting should commence about the middle of March, if the weather is not extremely unfavourable; but it should not, on any account, be deferred later than the end of that month. The pot in the first place should have an oyster shell, with its hollow side downwards, placed over the hole in the centre of the bottom; the pot must then be half filled with compost; the compost to be higher at the sides than in the centre of the pot, and one plant placed in each, having previously rubbed about half an inch off the surface of the old mould

above their fibres, clearing them, and cutting off the decayed points of their leaves. The ball is to be carefully placed in the centre of the pot, and the space between it and the sides filled up with the prepared compost. It is very necessary to be attentive in placing the plants, that they be neither planted deeper nor shallower than they were before; the compost should, therefore, be high enough to replace the old earth that was rubbed off in potting. When the plants are thus potted off for bloom, the pots should be placed in an airy part of the garden, under an arch of hoops, that in case of cold drying winds, heavy rains, or frosty nights, mats may be thrown over, to preserve them from the effects of such unfavourable weather; in this situation they are to remain, always open to the air, except in the cases above mentioned, and be kept regularly watered with soft water as often as appears requisite. When their flower stems are grown 8 or 10 inches high, it will be necessary to support them with sticks forced into the earth in the centre of the pot, to which the stems are to be loosely tied with small pieces of bass mat; these sticks should be as high as the hoops will admit, in order that the pots may remain under them as long as possible; but when the stems are grown too high for this situation, the pots are to be removed to the stage; and remain there till the time of blooming. The small sticks should be replaced with others more suitable for the occasion; these should be four feet long, regularly tapering a little from the bottom, and be painted green. If any small, green, winged insects appear on the stems or foliage of the plants, particularly upon or underneath the flower pods, they must be effectually extirpated or destroyed, either by means of a small soft brush or feather, by the application of a strong infusion of tobacco-water, or some similar easy and safe expedient. The calyx of many sorts contain a great number of petals, which, as they increase in bulk, will distend and burst it if not timely prevented; this generally happens a few days previous to the proper time for the blossoms opening, and will, if neglected, soon manifest the effects of such neglect, by letting out the petals on one side, thereby producing a loose irregular appearance, totally destroying that compact, graceful, circular form which a perfect flower ought to possess, and which is one of its greatest ornaments; but this disagreeable effect may be easily avoided by fastening a small narrow slip of bladder round the middle of the

pod where it is most swelled, and appears to have the greatest inclination to burst. The slip of bladder should be rather longer than is required to go once round, so that one end of it may lap over the other, which, by the application of a little gum water, will adhere firmly together, and answer the purpose completely.

When the major part are in bloom, it is necessary that the pots should stand upon a stage or platform of boards, raised about 12 or 15 inches above the ground; this should be very strongly supported, in order to sustain the immense weight of the pots without danger of giving way. The supporters of this platform should stand in shallow leaden or earthen vessels, filled with water, to prevent the access of earwigs, which are destructive enemies to the blossoms of Carnations; they secret themselves commonly during the night in the calyx, and soon commence their depredations by biting off and devouring the lower ends of the petals, which, of course, will cause them to drop out and thereby disfigure the flower. The stands, or reservoirs, should be broad enough to allow an intermediate space of water, three or four inches wide, between their sides and the supporters, placed in the centre of each. The pots must be kept constantly watered during bloom, and no favourable opportunity should be neglected to afford them the full advantage of exposure to light and air, by drawing up the cloth covering, (which is supposed to be attached to the stage,) but no rain must be admitted to the blossoms at any period of the blooming. Some persons place their stage or platform on one side, others in the centre; but a double row of pots on each side with a commodious path in the middle, is preferable. It is advisable not to let every pod bloom, especially such sorts as are naturally possessed of but few petals, because it would render each blossom smaller and thinner, than if only one or two were left on each plant; it is, therefore, proper in this case, to draw out the small lateral pods close to the stem as soon as they can be ascertained, in order that the remainder may have time to reap due benefit by it; but those sorts that have remarkably large short pods, abounding with petals, must be suffered to bloom them all, or the greater part; although in general three or four pods are as many as ought to be suffered to blow on one plant. These rules, or remarks, admit of some few exceptions, but the instances seldom occur.

August 3rd, 1833.

T. G. S.

ARTICLE II.—*On the Cultivation of Heaths, (Ericas.)***By PHILANTHOS.**

Herewith I send you a few observations on the management of *Heaths*; should you consider them worthy a corner in your valuable periodical, they are much at your service.

I know nothing more easy of culture than most sorts belonging to this lovely genus of plants, if treated in a proper manner; and yet how many persons who attempt to grow them, lose great numbers every year, and I am convinced that nine times out of ten, it is because they are afraid of watering them too much, which is an erroneous idea, if the pot has plenty of drainage at the bottom. And I am satisfied by practical observations, if the mould is allowed once to get thoroughly dry, the destruction of the plant is completed, more particularly if the pot is filled with roots. Again it is evident that many persons injure their plants much, by placing them in a situation, exposed to the scorching rays of a burning sun, especially if confined in small pots, for I always find those *Heaths* to thrive best which are kept in a shady place, say a shady shallow pit, or in any other convenient situation.

In collecting peat, I always choose that which contains a pretty good portion of sand, digging it in turfs, not above three or four inches in thickness; I then lay it up in a heap, there to remain for two or three years before it is used.

When about to pot off, or shift my plants, I chop the turfs well to pieces, then rub it through a coarse sieve, (as I do not approve of using it too fine;) after sifting as much as will be wanted for present use, I add to it about one third of sand, and mix the two well together; at the bottom of the pot is placed a few pieces of broken crocks, then a layer of the coarse turf peat, or such as did not pass through the sieve; on that a little of the composition, in which the plant is potted. I likewise keep them well supplied with moisture hereafter, especially in dry weather.

August 14th, 1833,

PHILANTHOS.

ARTICLE III.—*On the Cultivation of the Carnation.*—**By Mr. ALEXANDER MACKENZIE.**

As the *Carnation* is generally very difficult to cultivate true to its colours, I herewith send for insertion in the *Cabinet* the fol-

leaving remarks upon its culture, which is the best method that has ever come under my observation or practice. I propagate by layers in July, and when well rooted, plant them into small pots, using rich sandy loam, and place them in a shady situation until they are fresh rooted. I then plunge the pots in a south border, where they remain until severe weather comes on, when they are taken up and examined, and cleared from worms, and the soil in the pots firmed rather more than in ordinary cases; they are then placed in a cold frame, where they are kept until planted out for good, and only covered in severe or hot weather. After preparing the Carnation bed, and before inserting the plants, I either roll or tramp it heavily, the same as is commonly done for onions; this process I find greatly prevents them from dying off at an advanced stage of their growth, especially when the soil is of a light nature.

During the years of my apprenticeship, a border was made up for Vines in front of a Vinery, which was composed of about four parts of strong adhesive red coloured earth, (perhaps more properly clay or mortar,) two parts of new rich earth from an old pasture field, two parts of well rotted horse dung, and one part of newly-slacked lime, the whole put together in Autumn, twice turned during winter, and put to use the following Spring. The above border when fully prepared, was selected for a Carnation bed, and which turned out to produce strong luxuriant plants, with brilliant flower colours, far beyond their usual growth during former years in the same garden. The above has since induced me to try the same compost for a bed of select Carnations, and I have found it fully to answer my expectations, by giving strong grown healthy plants, with rich colours, from 30 to 40 inches in height, and having strong erect flower stalks supporting their large flowers, very erect, without hanging much down, as is often the case,—altogether showing what is generally called a good Carnation.

As I do not see any communication on the Carnation as yet in the *Floricultural Cabinet*, I hope it will not be considered as filling up the pages with useless matter by giving a few of the necessary properties, considered by Florists to constitute a good flower, i. e. a strong calyx, about an inch long, sufficiently firm at the top to keep the base of the petals in a circular body, rising about half an inch above the calyx; the outer petals turning off gracefully in a convex form, ably supporting the interior petals

which gradually decrease as they approach the centre, forming an imbricated surface, so as their united beauties at once meet the eye. The outer or broad end of each petal should be without either pring or indenture, and of whatever colours the flowers may be composed, they should be perfectly distinct; each petal should have a due proportion of pure white,—Bizarres rather less than one half,—Flakes one half,—and Picotees rather more than one half. Bizarres are generally esteemed preferable to Flakes, when their colours are rich and regularly distributed, although not running in regular stripes from end to end of the petals as in Flakes, which should have their colours disposed in long regular stripes, narrowing gradually to the base of each petal, and ending in a fine point. I had two parcels of Carnation seeds sent me in 1830; one parcel saved at Naples, the other at Milan—both places famed for raising seed to produce good flowers. I raised above a thousand plants from each parcel, and the result was not a flower worth keeping in the whole stock.

ALEXANDER MACKENZIE.

Edinburgh, August 1st, 1833.

ARTICLE IV.—*On the Culture of Hyacinths, (Hyacinthus Orientalis.)* By MR. T. K. SHORT.

This most beautiful and highly fragrant plant is a native of the Levant, growing very abundantly about Aleppo, where it blossoms in February. It is supposed that it was first introduced into this Country in 1595. The first mention of it was made by GERARD in 1596.

Only single flowered Hyacinths were at first cultivated, until PETER VOERHELM raised some double ones, the first of which he named Mary, which sort is now lost, but his third, "The King of Great Britain," which is now looked upon as the oldest double Hyacinth, was greatly preferred, the price of which was then, 1000 florins, or £100 sterling per bulb.

Culture. When the situation is determined upon, the bed should be marked out, and the soil removed to the depth of three feet six inches. Take manure from an old hot bed, and fill up the excavation with it, nine inches deep, treading it lightly down, then

fill up the space level with the surrounding surface, with one-fifth rotten cow dung, clean from litter, one third fresh earth, one third sharp sand, and one sixth decayed leaves. The compost should be prepared at least six months before wanted for use, and it must be put into the excavation a fortnight before planting in. When the bed is settled the bulbs should be planted about the sixth of November, placing them eight inches asunder, covering each bulb with a little cone of sand, mixing the colours as much as possible. The whole is then covered with light sandy earth, four inches deep. I always hoop over my bed in order to secure it from frost, or heavy rains, and having a canvas awning ready, I fix it over when required. I never water the beds, as the rain that falls after planting is quite sufficient for the roots. As soon as the leaves are yellow the roots should be taken up, cut off the stem and leaves about half an inch from the crown of the bulb, laying them upon the bed, each upon its side, covering them with sand; in this situation they should remain a fortnight, until the bulbs get dry and ripe. They should then be removed and placed upon shelves, in a dry room, not allowing the bulbs to touch each other, and be laid with the base upwards.

Having seen in the fifth number of the *Florist's Magazine* an article on the Culture of Hyacinths, by SNOWDROP, induced me to send the present communication, knowing, from the practice of ten years, that if the bulbs are not annually taken up, they produce nothing but offsets, and I am confident if SNOWDROP had tried his plan for a few years, he would have found the result to be as I have stated.

I cannot now pass over the opportunity of thanking SNOWDROP for the honour he has conferred upon me by liking me to a bear, I perfectly agree with what Mr. GIFFORD has so wisely stated in his remarks, at page 143, and thinking that silence is the greatest contempt with which one person can treat another. I shall take no further notice of Mr. SNOWDROP's observations, but employ my time on some better objects. Should, however, the SNOWDROP's dare to raise their insignificant heads against the strength of mighty bears, they will have to seek a retreat in the back ground of the shrubbery.

T. K. SHORT.

Martin Hall, August 7th, 1833.

ARTICLE V.—*On the Culture of Ixias, Gladioluses, Antholyzas, Watsonias, and Lachenalias.* By CROCUS.

Having cultivated Ixias, Gladioluses, Antholyzas, Watsonias, and Lachenalias, with the greatest success under the following mode of management, it is with much pleasure I forward them to you for insertion in your Magazine. And I do so with additional gratification, when I perceive that it is the request of a kinsman of mine 'SNOWDROP,' who wishes to obtain information in the culture of this class of bulbous flowers.

All the above, and many other bulbous plants included under the natural order Iridæ, I have found to thrive best when planted in the open border, in a mixture of very light sandy soil and decayed leaves, and if this cannot be obtained conveniently, a little peat soil should be used as a substitute; the border should be close under a *south wall*. I usually plant them six or eight inches deep, so that no ordinary frost can injure them; I cover the bed all over with dry litter, this entirely prevents the strong frosts from injuring the roots; and it likewise keeps a great deal of wet from them, which is very liable to rot the roots, an excess of which would damage them. They are readily increased by offsets from the bulbs, which I generally take up at the end of September and separate them; when this is done, I again plant them. By this treatment they will flower much stronger than if grown in pots.

I have read over with great pleasure the several remarks of SNOWDROP's, and I am sure if the above mode of treatment be practised by him, it will be found successful.—Your's, &c.

CROCUS.

Crocus Cottage, Aug. 31st, 1833.

On the Cultivation of Trevirania coccinea. By Mr. THOMAS APPLEBY, Gardener to the Rev. J. A. RHODES, Horsforth Hall, near Leeds.

Amongst the many interesting and beautiful plants which ornament our stoves and greenhouses, none is more worthy of care and attention than *Trevirania coccinea*, or what is perhaps better known as *Cyrtilla pulchella*.

Having been successful for years in growing and blooming it to great perfection, I hope, through the medium of your pleasing publication, to bring it into more general cultivation, and make its merits better known as an ornamental and useful plant for the greenhouse stage during the summer months, when the proper inmates are enjoying the open air.

In February I take the pots of roots and turn them carefully out; I then choose the finest, and put one in each pot, (sixties,) in a rich light compost of loam, leaf mould, and peat soil, in equal parts, adding as much fine sand as will make it perfectly open, equal to at least one-sixth of the whole. I give them a gentle watering from a fine syringe, and place them in a Calcutta stove, or warm dung bed, not giving them much water until the plants make their appearance. As soon as their roots reach the sides of the pots, I re-pot them into larger pots, (thirty-sixes,) putting about one inch of broken pots at the bottom of each pot for drainage, and adding a little rotten cow-dung to the above compost. Water is now given more freely, as the plants advance in growth; I find at this stage of growth they thrive best in a rather shady part of the stove, but not too far from the glass. Every sunny day I syringe over the whole plant with luke-warm water; this is very beneficial to them, causing them to grow very fast, and gives them a clean, healthy appearance. I suffer them to shew flower buds, and then finally pot them into twenty-fours, and remove them into the greenhouse, in the open sun on the stage, amongst Cockscombs, Balsams, *Salpiglossises*, &c., where they produce their brilliant scarlet blossoms in great abundance, to the admiration of every one who sees them. I had the blossoms on one plant counted, and they amounted to 257, many of which were nearly an inch across. The plant measured 2 feet in diameter, and was 20 inches in height, forming a splendid pyramid of scarlet

blossoms, mixed with handsome dark green foliage, making altogether one of the finest ornaments of the greenhouse during three months.

When the flowering season is over, I cut down the stems, and place the pots on a shelf in the stove, keeping them nearly dry until the returning season for potting, &c.

I think the above method far preferable to that of having clusters of plants in the same pots. I never saw such large flowers and healthy plants by the old plan as by single roots; and can confidently recommend my plan to your readers.

I shall send you shortly a paper on the cultivation of the genus *Salpiglossis*, another handsome family for the greenhouse in summer, if you think it would be acceptable to the readers of your *Floricultural Cabinet*.

THOMAS APPLEBY.

Horsforth Hall, Sept. 3, 1833.

PART II.

EXTRACTS.

Plants figured in the following Periodicals for September:—

Curtis's Botanical Magazine, 3s. 6d. coloured, 3s. plain. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow.

1. *Catasetum trifidum*. Trifid lipped. Class, Gynandria. Order, Monandria. Nat. Order, Orchidea. Orchis tribe of plants.—For this beautiful and most interesting species of *Catasetum*, the Glasgow Botanic Garden is indebted to Mr. LOCKHART, who sent the living plant from Trinidad. It produced its large spike of flowers in May. Flowers in a loose, drooping spike, large, of lurid green colour, tinged, and copiously spotted with purple. Labellum very spreading, lying close within the lower sepals, of a rather darker green, and more deeply spotted than the rest of the flowers; the intermediate segment purple. Culture: increased by division of plant. Soil: peat and rotten wood. *Catasetum*, from Kata, downwards; and seta, a bristle, from the bristle-shaped appendages to the column which points downwards.

2. *Astragalus procumbens*, Procumbent Milk Vetch. Diadelphia Decandria. Leguminosae. This plant was raised from Chilean seeds, by Mr. CAMERON, Curator of the Birmingham Botanic Garden. It is found in the plains at Concepcion, Valparaiso, and Coquimbo, and will probably always require the protection of a greenhouse or frame. It blooms in May. Flowers: bright blueish purple and yellow. Culture: increased by division of plant. Soil: sandy loam. *Astragalus*, from Aster, star; and gala, milk.

3. *Dracophyllum secundum*. Second flowered. Pentandria Monogynia.—Epacrideæ. The Epacris tribe of plants. This is a rare and highly interesting suffruticose plant, growing in the Royal Gardens at Kew, where it was raised from seeds sent by Mr. ALLAN CUNNINGHAM in 1823, and gathered near Port Jackson, where it was found growing in shaded ravines, in such humid situations as Ferns delight in. It is a singular looking shrub, with a good deal the habit of some monocotyledonous plants; the branches are terminated with a long and compound more or less dense raceme. Flowers: moderately large; Corolla cylindrical, a little ventricose; pure white, excepting a dusky rim at the top. Culture: it requires a greenhouse, increased by dividing the plant. Soil: sandy peat. *Dracophyllum*, from *Drakos*, a dragon; and *phyllon*, a leaf, from the general resemblance in the form of the leaves to the Dragon tree.

4. *Cattleya Forbesii*. Mr. FORBES' Cattleya. Gynandria Monandria.—Orchideæ. Orchis (Parasitic) tribe of plants. A native of Brazil, and introduced to the gardens of the Horticultural Society at Chiswick, by their collector, Mr. FORBES. The plant flowered in June 1832 and 1833, but produced at each time only a one-flowered peduncle. Stem six to eight inches high, swollen, and somewhat bulbous. Flower large and handsome. Sepals and petals spreading, of a yellowish green colour, with a brownish tint. Lip externally white, three lobed at the extremity; the central lobe white, with yellow edge. Within, the lip is very beautiful, having a broad deep yellow elevated line in the centre; the yellow gradually passing into rose colour at the edge, and the whole is marked diagonally with forked deep red elevated lines. Column whitish and marked with red lines. Culture: the same as other parasitical plants. *Cattleya*, named in compliment to WM. CATTLEY, Esq. of London, an eminent cultivator of plants and patron of Botany.

5. *Acacia verniciflua*, varnished Acacia. (Synonyms, *Acacia virgata*).—Polygamia Monœcia. Leguminosæ. This species was discovered by Mr. ALLAN CUNNINGHAM, during Mr. Oxley's expedition in 1817, in the country around Bathurst, where it flowered throughout the Winter. With us it blossoms in Spring. The plant is of a very slender habit, and producing a profusion of deep yellow globular shaped flowers; has a pretty appearance. It was first raised at Kew, from seeds sent in 1823. Culture: requires a greenhouse; increased by seeds or cuttings. Soil: sandy loam and peat. *Acacia*, from *Akazo*, to sharpen; many species being thorny.

6. *Ceropegia Wightii*. Dr. WIGHT'S Ceropegia. Pentandria Digynia.—Asclepiadæ. (The Asclepias tribe.) This very distinct species flowered this Summer, (1833) in the Edinburgh Botanic Garden, where it had been received from the East Indies, under the name of *C. bulbosa*. The whole plant is glabrous, twining, fleshy. Flowers: about an inch long, white, stained with deep rose colour. Culture: a Stove plant; increased by cuttings. Soil: peat and loam. *Ceropegia*, from *Kerox*, wax; and *pege*, a fountain.

7. *Astragalus vesicarius*. Bladdered Milk Vetch. (Synonyms, *A. albidus*, *A. dealbatus*, *A. glaucus*.) Diadelphia Decandria. Leguminosæ. This very handsome and highly desirable species of *Astragalus*, is a native of the barren wastes in the South of France and of Russia, as well as of Hungary, and is perfectly hardy, flowering in May. The flowers are always of a rich purple colour at first, becoming darker and almost blue in age, yet they appear in a wild state to be sometimes cream-coloured. Culture: increased by division of plant. Soil: sandy loam. *Astragalus*, from *Aster*, star; and *gala*, milk.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Esq.,
Professor of Botany, in the London University. Coloured
4s., plain 3s.

1. *Calceolaria crenatiflora*,—(description given last month, see page 152.)

2. *Dendrobium speciosum*. Shewy. Gynandria Monandria. Orchideæ.—Orchis tribe of plants. Scarcely any plant is more common in collections near London. It is often preserved in a greenhouse; in all cases it preserves

the deep green of its leaves, and its aspect of robustness, but it seldom flowers; this is owing to the weakness of the specimens, compared with what is natural to them in their own country. It is not enough to keep their leaves green and plump, it is also necessary that the plants should grow rapidly; then and then only will they yield their stately and beautiful racemes of pale yellow wax-like blossoms. It flourishes when kept in a warm damp atmosphere, in pots extremely well drained, and not exposed to the direct light of the sun. It is requisite to keep the plant free from slugs or woodlice, both of which delight in feeding on its exposed roots. *Dendrobium*, from *Dendron*, a tree; and *bio*, to live, growing upon trees.

3. *Calceolaria viscosissima*. Clammy. (Synonyms, *C. integrifolia viscosissima*, *C. rugosa macrophylla*, *C. rugosa latifolia*.) *Diandria Monogynia*. *Scrophularinæ*. A beautiful shrubby species, with the habit of *C. integrifolia*, except that it has a far more herbaceous character. It is covered all over with viscid hairs, so densely, that it is difficult to separate it from any thing that is pressed upon it. It grows about three feet high, and produces ample profusion of golden-yellow flowers all the summer long. Culture: it is a frame plant, easily multiplied by cuttings. *Calceolaria*, (see page 107.)

4. *Lobelia Tupa*. The Tupa poison plant. *Syngenesia Monogamia*. *Lobeliaceæ*. Of this plant we read as follows in the curious *Journal of Father Fenille*, who visited the West coast of South America between the years 1707 and 1712.—“All this plant is a most ready poison; its root yieldeth a deadly milk, as also doth its stem; the odour of its flowers produceth cruel sickness. When one handleth them, care must be had not to bruise the plant between the fingers; for if one thereafter rubbeth his eyes, some of the milk having touched them, a man will surely lose his sight, as hath been remarked by experience * * *. I found this plant on the mountains of the kingdom of Chily, as high as 37 degrees of south latitude.”—In the gardens it is an herbaceous plant, growing from three to six feet high, producing a number of unbranched stems, covered with broad grey leaves, and terminated by a raceme of dull but rich reddish purple flowers. It is not hardy enough to bear our Winters without protection, because of the wet; but keep it dry, and it requires no other care, for it will grow in any soil or situation. It flowers in August and September. Culture: increased by division of root. *Lobelia*, (see page 12.)

5. *Xerophyllum setifolium*. Tough leaved *Xerophyllum*, (Synonyms, *X. tenax*, *Helonias tenax*, *Helonias asphodelioides*.) *Hexandria Monogynia*.—*Melanthaceæ*. A most beautiful hardy herbaceous plant, having tall spikes of white and violet flowers, appearing in June and July. It grows very vigorously in peat soil. It grows wild in various parts of North America, especially in the sterile tracts called Pine-barrens, both on the East and West sides of the Continent. The natives, where it is abundant, weave their watertight baskets out of its tenacious leaves. *Xerophyllum*, from *Xeros*, dry; and *phyllon*, a leaf, in allusion to the texture of the foliage.

6. *Aster eminens*, curve leaved. (Synonyms, *A. junceus*, *A. longifolius*, *A. mutabilis*, *A. lavigatus*, *A. virginicus*.) *Syngenesia superflua*. *Compositæ*. A very common North American Aster, found in marshes and by the sides of ditches, from New York to Carolina. The leaves spread much when the plant is in flower, and the floral leaves are very taper pointed. The plant is a hardy perennial, growing often from five to six feet high, and bearing in the latter end of September a profusion of bright lilac flowers. The plant is common in gardens, and is often called *Aster salicifolius*. *Aster*, from *Aster*, a star.

7. *Gompholobium tunc*. Delicate *Gompholobium*. *Decandria Monogynia*. *Leguminosæ*. A little greenhouse under shrub, found on the South West coast of New Holland, by Mr. WILLIAM BAXTER, from whose seeds it was raised in the Nursery of Mr. KNIGHT, of the King's Road, where it flowered in August last for the first time in this country. It is nearly related to *G. virgatum*, from which it differs in the proportion borne by the standard to the keel; and also to *G. venulosum*, from which it is distinguished by its very narrow leaves. Flowers: yellow, outside of the vexillum purplish. Culture: increased by seeds or cuttings. Soil: sandy loam and peat. It requires to

be kept in an extremely well-ventilated situation. *Gompholobium*, from *Gomphus*, wedge, shape of pod.

8. *Bæbera incana*, upright branching. Syngenesia superflua, Compositæ. A native of Mexico, whence seeds were obtained some years since by E. BARNARD, Esq. It is a half shrubby greenhouse plant, of little beauty, and possessing the peculiar odour of French Marigold. Flowers: golden colour, blossoms in November. *Bæbera*, after a Russian botanist of the name of BOBER, whose merits are now forgotten.

Sweet's British Flower Garden, coloured, 3s., plain, 2s. 3d.

Edited by D. DON, Esq., Librarian to the Linnæan Society.

1. *Alstræmeria aurantiaca*, orange-flowered *Alstræmeria*. Hexandria Monogynia. Amaryllidææ. Introduced from Chile, by Mr. ANDERSON, the indefatigable collector, who accompanied Captain KING in his voyage of survey in South America. This plant requires the same treatment as *A. Simsii*, and appears to be quite as hardy as that species. *Alstræmeria*, from Baron C. ALSTRÆMER, a Swedish Botanist.

2. *Collomia lateritia*, red flowered *Collomia*. Pentandria Monogynia.—Polemoniaceæ. Introduced from Chile, by Mr. H. CUMING. It is distinguished from the *C. Cavanillesii*, of Messrs. HOOKER and ARNOTT, by its much smaller flowers, and by the tube of the corolla scarcely exceeding the calyx in length, while in that species it is nearly twice as long. It is a hardy annual, of very easy culture, and ripens its seeds freely, which come up spontaneously in the open border.

3. *Verbena venosa*, veiny-leaved Vervain. Didynamia, Angiospermia.—Verbenaceæ. This very showy species of *Verbena* is a native of the Pampas of Buenos Ayres, where it was discovered by Dr. GILLIES, and from seeds communicated by him to Mr. NEILL, plants were raised, which blossomed for the first time in the garden at Canonmills, near Edinburgh, in the summer of 1831. Colour, purple. It will be found to grow in almost any soil; is readily increased by slips, and blossoms abundantly in the open border during the summer months. *Verbena*, from Ferfaen, its Celtic name.

4. *Platycodon grandiflorum*, great bell-flower. Pentandria Monogynia.—Campanulaceæ. One of the showiest of this showy group of plants, and although introduced many years ago, it is still uncommon in our gardens. Colour, fine blue. It has entirely the habit of *Adenophora*, another genus separated from *Campanula*, and is chiefly distinguished from *Wahlenbergia*, by the broad petaloid bases of the filaments. It will be found to thrive best in a mixture of peat and loam, and is increased by parting the roots or by seeds. *Platycodon*, from the Greek *platus*, broad; and *kodon*, a bell-flower, great bell-flower.

The Botanic Garden. Monthly, 1s. 6d. large; 1s. small coloured.

Edited by Mr. B. MAUND.

1. *Collomia linearis*, linear-leaved *Collomia*, Pentandria, Monogynia. Polemoniaceæ. A native of North America; annual; introduced in 1826; height, 1 foot, flowers in May and June, colour, pink. It should be sown in autumn and spring, to secure early and late flowers; soil peat and loam. *Collomia*, from the Greek word, *kolla*, glue, alludes to the secretion of a glue-like substance on its seeds which hardens on their surface.

2. *Piptanthus nepalensis*, Nepal *piptanthus*. Decandria, Monogynia.—Leguminosæ. A native of Nepal; perennial; introduced in 1819; height, 8 feet; flowers in May and June; colour, yellow. It is a handsome evergreen shrub, which deserves a situation in every respectable shrubbery. Should severe frost occur in the first winter after this shrub has been transplanted,

we would recommend that a slight protection be given it. It is propagated by layers of the young branches. Piptanthus, from the Greek *pipto*, to fall; and *anthos*, a flower, the flowers soon falling off.

3. *Saxifraga Aizoon*, marginated saxifrage. Decandria, Monogynia. Saxifragæ. A native of the Alps of Europe; perennial; introduced in 1731; height, 9 inches; flowers in June. Colour: white, slightly spotted with pink. It will grow wherever a plant can be expected to grow. Saxifraga, from Saxum, a stone; frango, to break medicinal qualities.

4. *Salvia grandiflora*, great-flowered sage. Diandria, Monogynia. Labiatae. A native of South Europe; perennial; cultivated in 1616; height, 2 feet; flowers from June to September; colour, lilac purple. If it were requisite, the *Salvia grandiflora* could be propagated by cuttings of the young stems; but its increase at the root will generally suffice. *Salvia*, from *Salvus*, safe; medicinal qualities.

The Botanical Cabinet, 5s., ten plates, coloured; 2s. 6d. partly coloured. Edited by Messrs. LODDIGES's.

1. *Erica cantharæformis*. Octandria, Monogynia. A native of the Cape of Good Hope, introduced not long since; it is of upright growth, and flowers in May and June; colour, white; the flowers in shape resemble a little can. It requires the usual treatment of an airy greenhouse, and should be potted in sandy peat earth. It may be propagated by cuttings.

2. *Oxalis brasiliensis*. Decandria, Pentagynia. A native of Brazil, roots of which were received in 1829, from Mr. WARRE, who collected them himself. Colour, rose. It flowered in May, 1833, and is a very pleasing plant, as indeed are most of this extensive genus. It should be kept very well in the greenhouse, potted in light loam and peat: it increases itself freely by offsets.

3. *Solanum ligustrinum*. Pentandria, Monogynia. This is a native of Chili. Messrs. LODDIGES's received seeds of it from Mr. CUMING, in 1831, and it flowered in May, 1833; colour, purple. It is a free growing shrubby plant, with slender branches, and may be easily preserved in a greenhouse.—It will propagate readily by cuttings, which should be potted in rich loamy soil.

4. *Ixia curta*. Triandria, Monogynia. This splendid plant is a native of the Cape of Good Hope; it grows to the height of about six inches, and flowers in May and June; colour, deep yellow. Succeeds best in a border close to the front wall of a stove, where it has the advantage of the open air, yet is very rarely frozen: the soil should be sandy peat. It increases itself freely by offsets from the bulbs, or by seeds.

5. *Pimelea sylvestris*. Diandria, Monogynia. This is a native of New Holland; it has been lately raised by Mr. KNIGHT; it flowers in May and June; colour, white and pink; and appears to be a small shrub with few branches. It requires the protection of an airy greenhouse, and will increase by cuttings or seeds, which appear likely to ripen in this country: the soil should be sandy peat.

6. *Pimelea hispida*. Diandria, Monogynia. This, like the preceding, was raised in 1830, also by Mr. KNIGHT; its growth and habit appear very similar; colour, rose, and it flowers likewise in May and June. It is from New Holland, and must be preserved in a light airy greenhouse. It should be potted in sandy peat earth, and may be increased by cuttings or seeds.

7. *Cirrhaea viridipurpurea*. Gynandria, Monandria. This curious plant is a native of Brazil, and has been lately introduced. It flowers in May; the flowers open all at once, and continue for a considerable time. It requires the stove, and succeeds very well potted in vegetable earth with moss and fragments of broken pot, increasing occasionally by separating the bulbs.

8. *Bletia hyacinthina*. Gynandria, Monandria. A native of China, introduced in 1802; its flowers are exceedingly beautiful; they are produced during the spring months; colour, purple. It has been usual to keep this plant in the stove, but Messrs. LODDIGES's find it to grow and thrive in a far supe-

rior manner in the greenhouse; it should be potted in vegetable earth with a portion of sand, and increases itself freely by offsets from the bulbs.

9. *Hoya Poltsii*. Pentandria, Trigynia. This was introduced in 1824, from China, to the garden of the Horticultural Society, by their collector, Mr. PORRS, after whom it has received its name. Colour, light yellow. It has been kept constantly in the stove, and flowered in the month of May. It may be increased without difficulty by cuttings, and should be potted in rich loam.

10. *Iris Hungarica*. Triandria, Monogynia. This is a native of Hungary; it has been lately introduced, and is quite hardy; colour, purple and blue.—It produces its pleasing flowers in the months of April and May, and is well worthy of a place in any garden. There is no difficulty of increasing it by dividing the roots. It will thrive in any good soil, either in a pot or in an open border.

COLOURS OF FLOWERS.—The fugitive property of some colours is well known, and in no way better exemplified than as they naturally exist in flowers. The fume arising from a common sulphur match, which is, in fact, sulphuric acid, will change purple and crimson colours to pink. The blue, in combination with red, is readily discharged; indeed a pink or purple flower might be completely bleached by holding it in the fumes of sulphur. Thus roses and dahlias have been made to assume a variegated and very novel appearance. Bright pink stripes and veins may be produced on the dark purple petals of pansies, and other dark coloured flowers, with a camel hair pencil and oil of vitriol, to yield rather a pleasing effect. Such lines should not be drawn to the edge of the petal, or a little injury will soon be evident; nor should they be strong nor near together, as they quickly spread.—*Maund's Auctarium*.

APPEARANCE OF LEAVES EXAMINED WITH A MICROSCOPE.—The back side of a rose-tree leaf, but especially that of a sweet-briar, appears to be diapered most excellently with silver. The back side of the leaf of English mercury seems as though it were rough-cast with silver, and the ribs appear to be stuck full of round white transparent balls, like innumerable grapes or oak apples, or bracelet of crystal with foot-stalks, by which they are fastened to the ribs and fibres of the leaf. A leaf of rue seems to be full of holes like an honey-comb; a sage leaf is like a white rug or shag, full of knots tasselled with white silver thrums, having one or two fine round crystal beads or pendants, as big as peas, fastened to every knot. Look at the back side of a nettle leaf, and you will see it full of needles, or rather long sharp transparent pikes, every needle having a crystal pommel, presenting the appearance of a sword-cutler's shop, full of glittering drawn swords, tucks, and daggers. Of a similar appearance are the prickles of borage leaves and stalks.—*Field Nat. Magazine*.

TULIP FLOWERS UNDER TWO OR MORE NAMES.—Acapulco, or Siam; Hebe, or Queen of England; Andromache, or Globertine; Gloria Mundi (white) or Gloria Alborum; Hector, or Milo; Pretiosa, (fine) or Thunderbolt; Catharine, or Athalia; Duchess of Wellington, Boadicea or La Joil Blanc; Harmonious, Foudre de Jupiter, or Navarino; Tippoo Saib, or Buonaparte; Pearson's Helena, or Georgius Tertius; Matilda, or Rose Ruby; Heroine, or Triumph Royal; Triomphe de Flora, or Domingo; Alcon, or Alexander Magnus; Director General, or Gloria Mundi; Platoff, or Waterloo; Fortescue, or Albion.—*Hogg's Supplement on Flowers*.

REFERENCE TO PLATE.

MISS FANNY KEMBLE TULIP.

We have not had the gratification of ever seeing this deservedly highly famed flower. In fact, although we had heard of its existence, we could not learn in whose possession it was. For obtaining a knowledge of that, and otherwise assisting us in obtaining a drawing of it, by that clever artist, Mr.

E. D. SMITH, so that we have been enabled to insert it in our Magazine, we are under lasting obligations to our valued correspondent SNOWDROP. We only received information of the Tulip being in possession of Mrs. DAVEY, relict of the late Mr. THOMAS DAVEY, Florist, King's Road, Chelsea, a few days before the public sale of the plants of that once spirited, ardent, and successful cultivator of what is usually termed Florist Flowers. It will readily be seen by our readers that the flower, when the Drawing was taken by Mr. SMITH, was in an advanced stage of blooming; and on that account its colours, shape, and other previously regular and deservedly esteemed properties this flower possesses, was far from being as perfect as otherwise it would have appeared if taken at a more early season. At the sale of Mr. DAVEY's effects it was purchased, having two offsets, by JOHN GOLDHAM, Esq., of Pentonville, London, for £72 10s. We have much pleasure and satisfaction to be enabled to give a more particular account of the Tulip, as given by a cultivator of florist flowers, and an intimate friend of the late Mr. CLARK, who raised it. The following account is taken from Mr. HOAG's very excellent Supplementary Treatise on the cultivation of flowers—(see Cover of the June Number of this Magazine.)

"Among the new Tulips raised from seed by our own florists, which have been recently broken into colour, there are a few, beyond all doubt, of sterling merit, and worthy of every encomium; but I consider it the extreme of folly to endeavour to create and inspire a longing for any flower, which, in all probability, will not be gratified for five or six years to come; therefore, every florist must not expect to find in me a willing herald, ready to sound the praises of any such new flower. A really good flower wants no blazonry; it best bespeaks its own praise, and the fame of it soon gets abroad; if this fail, let those immediately interested undertake the office at the time they have any bulbs to dispose of. Yet, out of respect for the well known veteran florist, Mr. DAVEY, of Chelsea, now in his seventy-fifth year, and in whose breast the fancy for Tulips is as predominant as ever, who gave last Autumn one hundred sovereigns to the executors of the late Mr. CLARK, to entitle him to the possession of that loveliest of all Tulips, 'Miss Fanny Kemble,' I feel bound to attempt a short description of this flower, which was the pride and boast of its late owner, and which excited the envy and admiration of all the amateurs who went to view it. This 'precious gem,' a Bybloemen Tulip, was raised from one of Mr. CLARK's seedling breeders, and broke into colour three years ago; it has produced two offsets since, and is adapted to the second or third row in the bed; the stem is firm and elastic; the foliage full and broad, of a lively green; the cup large, and of the finest form; the white pure, and wholly free from stain; the pencilling, on the petals, is beautifully marked with black or dark purple, and the feathering uniform and elegant; it preserves its shape to the last, the outer leaves not sinking from the inner; in a word, it is considered the first flower of its class, and the best that has ever been produced in England; being now in the possession of Mr. DAVEY, it may be viewed when in bloom at his garden, in the King's Road, Chelsea."

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

REQUEST OF SNOWDROP, &c.—Snowdrop asks if milk has been used to plants? Evelyn mentions a MILK DIET as beneficial for plants, orange trees if I recollect right, which are not quite healthy. I hope Snowdrop will give the result of his experiments.—Would not re-potting the *Cactus speciosissimus* in Spring into rich soil, and cutting off the tops, tend to throw the plant into flower?

August 20th, 1833.

C. C. C. C.

ON AUTUMN-FLOWERING ANNUALS FOR THE GREENHOUSE, &c.—In the monthly Floricultural Calendar for August you state, “many sorts of Annuals now sown in pots will bloom during Autumn, and make a fine show for a greenhouse.” Now I take it for granted there are others besides myself who are totally unacquainted with the habits and growth of a very numerous class of Annuals; for the information of such persons, perhaps you will have the goodness to insert in the next number of your *Florist's Magazine*, a concise list of those Annuals to which you have thus previously alluded.

Bayswater, August 15th, 1833.

A SUBSCRIBER.

[NOTE.—We did not receive the above communication till September 2nd, or we should have attended to the request in our September Number.—We are sorry it so happened, as the advantage of the present season cannot be embraced. The following sorts of plants, among many others, will be found to answer the purpose stated in our calendar. The seeds should be thinly sown in pots, in which they are to remain without transplanting; the pots should be placed in heat till the plants are up, and afterwards be kept in a warm out-door situation, and be well attended to with water. About the middle or end of September, “regulated by the coldness or mildness of the season,” the pots should be placed in the greenhouse, and the plants hereafter named we know will bloom freely till the middle or end of November:—*Anagallis indicum*; *Ageratum angustifolium*; *Browallia elata*, blue and white varieties; *Do. elongata*; *Do. grandiflora*; *Calceolaria pinnatus*; *Calendula pluvialis*; *Calliopsis bicolor*; *Do. Atkinsonia*; *Clarkia pulchella*, rose and white varieties; *Cleome roseum*; *Iberis umbellatum*; *Kaulfussia amelloides*; *Lychnis roseum*; *Madia elegans*; *Mimulus floribundus*; *Mignonette*; *Petunia nyctiginiflora*; *Salpiglossis Barclayana*, hybrida and other species; *Scizanthus pinnatus*, porrigens, retusus; *Valerianella congestum*; *Verbena aubletia*; *Senecio elegans*, all the varieties; *Larkspurs*, tall branching and dwarf varieties.—CONDUCTOR.]

An anonymous correspondent in page 47, has made inquiry about the method of treatment required with Levick's Incomparable tipped Dahlia, in order to have it produce tipped flowers. I have a plant of the sorts growing in poor soil, which I had been advised to cultivate it in, and although there is abundance of blossoms, all are of dull red, not a single tipped bloom. I beg the favour of Mr. LEVICK, the raiser of the plant, or some correspondent who knows the art of suitable culture, to favour us with the mode of culture.

Pimlico, Sept. 3rd, 1833.

JOHN EMORY.

ANSWERS.

ON THE NATURE OF SOILS, &c.—In reply to your correspondent W. W. J., (page 114,) relative to a description of the various kinds of soils named in his Query, I herewith send you a concise description of their nature, and a few observations concerning where they are generally to be found; also the method of preparing them for use. Loam, peat, and sand seem to be the three requisites for our purpose; to which we occasionally add rotted dung, and vegetable mould. From this mixture composts may be made to suit all plants.—First, of loam. This is a loose, friable kind of earth, the constituent particles of which crumble and separate easily in the hand; it is of various textures, the strongest approaching a clay, and so down in several shades, until the lightest becomes nearly similar to sandy peat; it is found of different colours, viz. reddish, black, yellow, &c.; sometimes it partakes of a saponeous quality, approaching to a marle; this when predominant is not commendable for general use, yet there are some articles for which it may be used with success. Red or yellow seems to be the natural colour of maiden loam, as either will change to black as they become more or less mixed with other extraneous substances, such as dung, &c. Therefore, to have it pure, which is very material, one should prefer either of these, if they can be conveniently procured. The places to look for this kind of earth are generally in fields that have not been broken for a long series of years; also sheep downs or commons, most frequently running in dry banks. Its strata are of various

thicknesses, sometimes being little more than that which forms the turf or upper sward, and at other times lying from one to four feet under the surface. That is generally the best which is of a moderate depth, being more within the ameliorating powers of the sun and atmosphere; the other, lying deeper, and being known to abound with crude, unqualified matter, is very unfavourable to the growth of tender plants. This sort of soil is particularly adapted for striking cuttings in general, on account of its firm, close texture, and retaining moisture longer than either peat or sand. From its strength it seems more adapted to arborescent plants in general, which have powerful roots, that are seldom able to support themselves in lighter soils, more especially in dry seasons.—Second, of peat. The word peat is generally understood to mean common bog earth; however, that which may literally be termed bog, is by no means proper for our purpose, on account of its wet, coagulating nature, and tendency thereby to rot the roots of the plants; at least, if peat is to be taken from these situations, the very surface only should be chosen, as that is found to contain a greater portion of the fine, drying, opening kind of sand, so necessary to this species of soil. The places where I would recommend to look for the proper peat, are those dry, healthy commons, where it seems to form a medium between bog earth and sand; it is not unfrequently found forming a mere skin, over a bed of pure sand or gravel. The turf or sod, cut about four or six inches deep, is always the best for use, as it is in general the lightest, and abounds with sand, as already mentioned, which is, I think, invariably found to be the finest near the surface in such cases. Spots where the wild heath grows luxuriantly should be selected, as producing the best peat for use; but the peat answering for one species of plants will not be so congenial to another, brought from a very different situation and soil. It will therefore be obvious, that a supply of every variety of soil should be at hand. The peat should be laid in a heap for twelve months before used, and be turned over a few times. Most plants grow freely in peat during summer, but they require great care to supply them well with water. Plants in this soil are often found to perish in winter; the reason is, its extreme lightness, and the cold necessarily produced by frequent watering. Shrubby, hard wooded, and fine fibrous rooted plants, thrive well in peat and loam, about equal proportions.—Sand is not used alone, except for striking cuttings of plants in, such as heaths, &c. The soil of the interior parts of Southern Africa is excessively sandy; a considerable portion of sand should always be used in the composts in which plants from that country are potted in. Pit sand is the best for use; it is of a lively, vegetating nature, and is very superior to river or sea sand; the whitest is the best.—Vegetable mould is that kind of soil found in woods, produced by the annual fall of leaves, or by leaves being collected together, and a layer of earth and a layer of leaves being heaped together to the depth of half a yard or two feet; by being often turned, in a year or two it becomes perfect mould. It is of a very loose, light nature, and comparatively rich. In its simple state it is scarcely fit for the growth of any thing, excepting annuals, as its extreme lightness, like peat, renders it unable to support arborescent plants; however, when mixed with loam, having a more close and firm texture than itself, it is particularly useful for Cape plants, as geraniums, &c., especially for annuals.—Of animal manure, that procured from old hot beds, and rotted to a perfect mould, is the most suitable. When mixed with a portion of loam, it is the best for plants that have fleshy roots, also for half shrubby and herbaceous kinds of plants, annuals, biennials, &c. It is never used simply by itself, and rarely mixed with peat or sand.—I intend to continue my observations on soils at some future opportunity, and will forward them to you.

August 15th, 1833.

J. PRICE.

ON THE CULTURE OF *IXIAS*, &c. IN REPLY TO THE QUERY OF SNOWDROP.—Having noticed a query in No. VI. of the Magazine relative to the cultivation of *Ixias*, &c., by SNOWDROP, and as I have very successfully grown the plants he makes request about, I herewith send in reply the method I have pursued. I have cultivated *Ixias* with great success, in pots kept in a greenhouse, and in the open border.

Iris in pots.—In May, when the leaves are dead, I turn all my bulbs out of the pots in which they have grown, and clean the bulbs. I then place them in partitioned drawers until October. I then repot them, putting four bulbs in each small pot; I use 30's. The soil I use is a mixture of equal parts of loam and peat. I place them in a cold frame until the foliage appears; then remove them into the greenhouse. As the plants advance in growth, and the roots appear through the bottoms of the pots, I remove them into larger sized pots, repeating it if required until the blossoms appear. I use liquid manure water, at all times, to the plants.—*Antholyzas*, *Watsonias*, *Lachenalias*, *Sparaxises*, and *Tritonias*, flourish under the same mode of cultivation.

I observe, in page 68, a correspondent requests information about the culture of *Amaryllis Sarniensis* (Guernsey Lilies), I beg to inform him of the method I have successfully pursued with that plant. The blossoms of this plant appearing late in autumn, and the foliage coming under the disadvantage of a declining sun, is the reason why the same bulb so seldom blooms for successive seasons, in this country. Having tried the method recommended by T. A. KNIGHT, Esq., President of the London Horticultural Society, and found it to answer well, I now send, for your correspondent Mr. PRICE, an extract from the Article published, of Mr. KNIGHT's mode of culture:—"Early in the summer of 1816, a bulb which had blossomed in the preceding autumn was subjected to such a degree of artificial heat, as occasioned it to vegetate six weeks sooner than it otherwise would have done. It did not, of course, produce any blossoms, but in the following season it flowered early, and produced two offsets. These were potted in the spring of 1818, each pot containing one-eighth of a square foot of mould, and were fed with manure water, and their period of vegetation again accelerated by artificial heat. Their leaves turned yellow with maturity, early in the present spring (1819). I entertained no doubt but that both the bulbs would afford blossoms, but I was very much gratified by the appearance of the blossoms in the first week of July." I have tried the above method, and found it to answer every expectation; but at the same time I think the trouble is more cost than the purchase of fresh-imported bulbs would be.

Martin Hall, August 16th, 1833.

T. K. SHORT.

We have made inquiry about a collection of *Auriculas*, and beg to inform our correspondent PAUL PRY (page 96,) that a most select collection is grown by Mr. JOSEPH WATERHOUSE, Florist's Lodge, Lady's Walk, Sheffield, and every sort in general cultivation can be obtained of him at a moderate cost, and true to their kinds. We inserted a plate in our June Supplementary Number, of a most splendid seedling named Waterhouse's Conqueror of Europe. Our draftsman had only a slight opportunity of taking a drawing of it, which Mr. WATERHOUSE states does not give the perfectness of the flower. We saw the plant in bloom at the Sheffield Horticultural exhibition, and it is in our opinion very superior to every other *Auricula* we ever saw. We have grown for a number of years 120 sorts, included in which was all the best kinds in general cultivation, but none of ours was any thing like equal to it.

CONDUCTOR.

REMARKS.

CARNATIONS are divided by Florists into the three following classes:—

1. Bizarres, or such as have two colours on a white ground.
2. Flakes, or such as have one colour on a white ground.
3. Picotees, have a white or yellow ground, spotted or pounced with scarlet, red, purple, or other colours, and are further distinguished by the serrated margins of their petals.

The following are what Florists call the good and requisite properties of a Carnation:—

1. The stem of the flower should be strong and straight, not less than 30, nor more than 45 inches high, and able to support the weight of the flower without hanging down, which flower should at least be three inches in diameter.
2. The petals should be long, broad, and substantial, particularly those of

the lower or outer circle of petals, commonly called the guard leaves; these should rise perpendicularly, about half an inch above the calyx, and then turn off gracefully in a horizontal direction, supporting the interior petals, which should decrease gradually in size as they approach the centre, and with them the centre should be well filled. All the petals should be regularly disposed, and lie over each other in such a manner as that their respective and united beauties should meet the eye altogether; they should be nearly flat, or with only a small degree of inflection at the broad end; their edges should be perfectly entire, without notch, fringe, or indenture; the calyx should be at least an inch, sufficiently strong at the top to keep the bases of the petals in a close and circular body.

3. The middle of the flowers should not rise too high above the other parts.

4. The colours should be bright and equally marked all over the flower, perfectly distinct, the stripes regular, narrowing gradually to the claw of the petal, and there ending in a fine point. Almost one half of each petal should be of a clear white, and perfectly free from spots.

5. The flower should be very full of petals, so as to render it, when blown, very thick in the middle, and the outside perfectly round.

ON PINKS, CARNATIONS, DAHLIAS, &c.—Pinks, in consequence of the hot and dry weather in May, have neither been very large nor very fine this year in the neighbourhood of the Metropolis; and for the same reason, Anemonies and Ranunculuses were a complete failure. Carnations and Picotees, on the contrary, have been particularly fine, and their colours bright and clear; they came into flower a fortnight at least sooner than usual, and owing to the refreshing showers and cool moist atmosphere, have been of considerable duration. There is likewise every prospect of a good crop of seed since the hot weather has set in, especially with those florists who are at the pains to set the flowers by fecundating the stigma of the pistils or horns that make their appearance above the calyx, taking care to extract the withered and dead petals, which, if left in, are apt to imbibe and retain the wet, and thus rot the base of the seed vessel and render it abortive. Two of the best seedling Carnations that I have seen this year, are two purple flakes; the one is called *Lacelle's Queen of Sheba*, raised by a Clergyman near Cambridge; it is of excellent formation, the petals well rounded, the white good, and the purple bright and shining like enamel: the other is a full sized flower of equally good properties, having the petals well flaked with the deepest purple that I have ever seen in any Carnation; it was raised near Reading three years ago, and is expected to be sold out this Autumn at 10s. a pair, of which notice will be given in your Magazine; it is called *Alleway's Wonder of the World*.

Dahlias to all appearance promise an excellent and early bloom, if the weather continue favourable; but if it should remain dry for any length of time, they will require to be watered freely. A most superb Dahlia, raised last year by Mr. WELLS, of Bickley, to whom we are indebted for *Agrippina*, *Lutea purpurea*, and other fine varieties, is coming out next May, under the name of *Lady Ramsden*, at 5s. a plant; it is perfectly double, large, and well formed, and the colour a very bright pinky rose. Permit me also to notice two other seedling Dahlias, in the way of *Levick's Commander-in-Chief*, that have been shewn this year; the first raised by Mr. BATES, of Oxford, has a broad crimson stripe up the middle of each petal, which is of a reddish purple; the other raised by Mr. HOGG, of Paddington, (the author of the excellent *Supplement on Florist's Flowers*,) is marked in the same manner with a bright crimson stripe, only the rest of the petal is of a dark purple.—One of the nearest approaches of variegation in a double Dahlia to that of a flaked Carnation, was seen in a French flower, called the *National*, exhibited by Mr. HOGG, at a meeting of the Horticultural Society in Regent-street, on Tuesday, the 7th of August; the flower was of a dirty white, or rather cream colour, with broad and narrow stripes of clove red, running irregularly the whole length of the petals; it excited much notice, though the flower was not of the best formation.

London, August 15th, 1833.

CRITO.

P.S. The Dahlias began to flower early this season, but they seem to suffer greatly from the ravages of earwigs, which do not seem fond of entering the

tin tubes recommended by DIANTHUS, of Malden, painted or unpainted; I think they are deterred either by the cold smooth surface, or by the smell of the tin; wooden tubes of a similar form and dimensions appear more eligible, though they are not so durable. Some persons place on the tops of the stakes small inverted garden pots, known round London by the name of thumbs, loosely filled with a little dry moss or hay, into which the insects retire at the approach of day or of wet weather; these rather unsightly objects, of course, will require to be examined frequently, and the insects found in them destroyed; 48 or 32 sized pots fixed on the stakes, will protect the blooms from the sun and rain, which are intended for exhibition, because it helps to preserve their freshness of colour the longer.

T. HOGE will be obliged to the Conductor of the *Florist's Magazine*, to correct an error in his letter of June 15th, respecting that admirable flower, the Springfield Rival Dahlia; it was raised by GEORGE LYNE, gardener to Mr. Perkins, the Brewer, at Springfield, in Surrey, instead of near Bromley, in Kent; and Mr. INWOOD, in consequence of the improper interference of the person named GLENNY, was obliged to pay in money and Dahlias to the amount of £10 10s. for it instead of £5 5s., the sum first agreed on.

Paddington, Sept. 6, 1833.

EXHIBITION OF FRUITS AND FLOWERS AT THE LONDON HORTICULTURAL SOCIETY'S GARDENS.

The third and last public exhibition for the year took place on Saturday, July 20, in the Society's Gardens at Chiswick, distant from London five miles. The individual articles ticketed amounted to nearly four hundred, which were arranged with considerable taste by Professor LINDLEY, and Mr. MUNRO, the head gardener, in an immense tent, capable of containing at least 500 persons at a time, who moved round the tables in succession to inspect and examine these various productions of nature; the display of both was grand and gratifying to the view, and afforded much satisfaction to the company, which amounted, it is supposed, to 2,000 persons, consisting of the principal Nobility and Gentry then in London, the greater portion of whom were Ladies; the attendance also of nurserymen, florists, and the gardeners of the members was very considerable. The aim and object which the Society seem to have in view, in opening the gardens for these public exhibitions in honour of Pomona and Flora, in the three pleasant months of May, June, and July, to which every gentleman, gardener, and florist in the kingdom are at liberty to send the productions of their own gardens whether they belong to it or not, is not only to afford an agreeable recreation to the members and their friends when the town is in general full of company, but to encourage and excite a spirit of rivalry and competition among all growers and cultivators, by awarding their honorary medals to those who shall produce and exhibit the best specimens of fruits, with distinction of size, flavour, and other properties; and to such also as shall produce the most perfect blossoms of flowering shrubs, either cut or growing on them in pots, and the same of plants and flowers in general. At each of these exhibitions, three large Silver Medals and six Banksian ditto were awarded, which I think might be increased to four of the former and six of the latter, when the competitors are numerous, as was the case in July, some of whom were heard to murmur and say, "that there was little chance of getting a medal amongst so many that shewed."

The gardens seemed in good order, perfectly clear of weeds; the trees and ornamental shrubs looked healthy, but many of them seem to have out-grown their confined situation; there appeared, however, a deficiency of flowers, particularly of the new and choicer kinds of annuals which used to have so gay an appearance there. It is to be hoped that the Council, if they mean to continue these public exhibitions, which afford so much pleasure and are so well attended, will not suffer their parterres of flowers to be thus neglected; they ought, on the contrary, in the true spirit of gallantry, for the sake of those Ladies who are members as well as for the sake of their other fair visitors,

to increase the number of them; they might apportion at no great expense or labour, a part even of the Kitchen or experimental Garden now uncultivated, and lay it out in fanciful figured beds and compartments for all such plants and flowers as come into bloom in June, July, and August, taking care to plant or sow each compartment with a different species or variety; a solitary flower, however beautiful, if intermixt here and there with others in a garden like this, is in a manner lost; it is only in beholding them growing in masses that the effect is felt, and the eye gratified; this would in some measure obviate the complaint alluded to.

The management of the standard and trained fruit trees, which generally appeared in good bearing, does much credit to their curator, Mr. THOMPSON; no gardener who visits London ought to neglect taking a view of them, and to examine attentively the way in which they are pruned and trained. The ground itself being flat and level without any of those undulations of surface, natural or artificial, as the raised mound, the sloping bank, the mimic vale, and the murmuring rill, presents little or none of that picturesque beauty and grandeur which we meet with in some of the pleasure gardens of our Nobility.

DISTRIBUTION OF PRIZES.

The first large Silver Medal was awarded to Grapes, from C. DOWLING, gardener to Lady Clark; the second to Stove and Greenhouse Plants and Flowers, from Mr. REDDING, gardener to Mrs. Marryat, of Wimbledon; and the third to blooms of Carnations and Picotees, from Mr. HOGO, Paddington.

The first Banksian Medal to Pines and Grapes, from JOHN WILSON, gardener to the Earl of Surrey; the second to Flowers and Fruits, from S. SNOW, gardener to J. H. Palmer, Esq.; the third to Cockscombs and other Flowers, from J. FAULKNER, gardener to Archdale Palmer, Esq.; the fourth to Dahlias, from JOHN COOPER, gardener to Mrs. Law, of Cannon Hill; the fifth to German Stocks, from Mr. HOPWOOD, florist, Twickenham; and the sixth to Carnations, Picotees, and Dahlias, from Mr. GEORGE GLENNY, of Twickenham, Editor of the Horticultural Journal.

No dissatisfaction that I heard of was expressed at the judgment and decision of the Committee of censors and umpires, whose duty it was to examine the various articles and to award the prizes.

The black Hamburg Grapes sent from Lady Clark's, were of unusual size, in bunches of 4lbs. and 4½lbs. weight; the Racemes and Peduncles were of corresponding strength and magnitude; the only observable defect wanting to render them perfect, was a slight brownish hue on a few of the berries instead of that dark rich bloom, which adds so greatly to their beauty, even if it does not improve the flavour; they were much noticed, for no others could compete with them. The Carnations and Picotees of Mr. HOGO were also among the most attractive objects at the exhibition; the flowers were remarkably fine, large, and distinct, and being ranged in four boxes set close together, produced a very striking effect; the first box contained 24 varieties of Carnations, the second 24 ditto of English Picotees, the third 24 ditto of foreign Picotees with yellow grounds, and the fourth 18 blooms of Self Carnations, of various shades.

The excellence of these Carnation blooms affords no small proof in favour of the mode of culture which is recommended and minutely described in Mr. HOGO's valuable and recently published Supplement.

The display of Dahlias was pretty considerable, but the proper season for their flowering not having arrived, the blooms were neither distinguished for size nor variety of colours; there was a total absence of the striped, the mottled, the radiated, the tipped, and picoteed. It was impossible in such a moving crowd to minute down many of the flowers that were placed in the tent. There were several fine specimens of Fuchsia, Hibiscus rosa sinensis, Callipora flava, Lupinus ornatus, and of Salpiglossis in great variety. The flowers of Colochortus venustus, splendens and luteus, which are so much admired and so much coveted, shone with peculiar lustre; these plants, I understand, are still exclusively in the Society's possession.

It was whispered among some persons in the gardens, and asserted very confidently, that one man had gained a Banksian medal at one of the meet-

ings for shrubs and flowers, the greater part of which had never grown in his own garden;—so little regard have some of those ambitious and would-be-thought clever men to honour and fair dealing.

Two bands of music, belonging to the Guards, were stationed at each extremity of the garden, and continued to play from time to time several favorite tunes and pieces of music for the entertainment of the company. Numerous seats and garden-chairs were also placed in different parts for their accommodation. The occasional martial airs and animating sounds of the higher-toned instruments seemed to produce a heart-stirring effect upon the younger visitants, who to all appearance greatly enjoyed the pleasant scene.

At six o'clock the exhibitors were at liberty to remove their several productions, which in some instances they had no little difficulty in effecting. Large groups of *belles actrices*, in the persons of fashionably dressed ladies, with longing eyes and watery mouths, were hovering round the tables, ready to take part in the concluding burletta, farce, and scramble. They soon commenced, "*sans grace and sans ceremonie*," a fierce and desperate attack upon the remaining fruits and flowers. This excited at once the merriment and the surprise and disgust of the less aristocratic and better behaved part of the company. Some, in eager haste, according to their various tastes and predilections, were loudly inquiring for the best-flavoured melons, cherries, and gooseberries, and others for the sweetest grapes, peaches, and nectarines; while the minor and less inviting fruits, apples, pears, plums, currants, &c. passed unheeded. One Lady of rank was seen to carry off in triumph an immense bouquet of flowers; and another amazonian Dame seized a punnet of grapes, and made good her retreat backwards, when she partook of them with her party of friends outside. Such scenes are to be witnessed at those meetings, but not to be applauded, at which experience, I suppose, has taught those Ladies that nothing is to be got without this unlady-like struggle; some plan for a more general and equitable distribution of them ought to be devised and acted upon by the Council.

At the conclusion of this scene, about half-past seven, a heavy shower of rain came on, though the weather had been most favourable till then, which dispersed the company and drove them reluctantly, some to their close carriages, and some to the tents prepared in case of such an untoward occurrence; others resorted to the booth of Mr. GUNTER, the commissary purveyor on the occasion, and sought for consolation and refreshment by partaking of some excellent Wines, Coffee, Biscuits, &c. which were supplied at moderate charges, marked on a board outside.

"SIC TRANSIT GLORIA MUNDI."

MONTHLY FLORICULTURAL CALENDAR FOR OCTOBER.

AURICULAS.—The plants should now be taken into Winter quarters, by placing them in frames, &c. A layer of lime rubbish, or coal ashes, should be sprinkled over the surface; upon this prepared bed let bricks be laid in rows, so that the pots can stand thus elevated, which admitting a free circulation around the pots and plants, is very beneficial to the latter. At all times through the Winter, admit all possible air, so that the plants be protected from wet, and never water the plants over the foliage, nor give any to the roots till they are quite dry, particularly in frosty weather; for during its severity, the drier the roots are, the less will the plants suffer.

ANNUALS.—Seeds of most kinds will now be perfected; if not before, they should be gathered before frost operate upon them, or in many instances the seeds would be destroyed by it, more particularly so, if with the frost there is wet.

ANNUALS.—Seeds may still be sown in pots for planting out next Spring.—(See last Month's Calendar.)

BIENNIALS.—Plants of this class may now be successfully planted out, so that they may strike root before Winter sets in. When Biennials are delayed

planting out till Spring, they do not bloom so vigorously or profusely as if planted in Autumn.

CALCEOLARIAS.—Plants of the Herbaceous class out in open borders, should have any offsets taken off and potted, in order to have Winter protection, and be suitable plants for turning out next Spring.

CUTTINGS, or Slips of shrubby Calceolarias, Pelargoniums, Fuchsias, &c. may still be successfully put off, for striking the earlier in the month, the better they will succeed. (See last month.)

CARNATION LAYERS, if not taken off and potted, should be done early in the month, and be placed in frames for Winter protection.

CHRYSANTHEMUMS, in pots, should be taken into the greenhouse or cool frame, admitting all possible air at every opportunity, for if the plants be drawn, the blossoms will be weakly, and the colours not near so fine as they would otherwise be. When Chrysanthemums are trained against open walls, it is of service to protect them, by means of a boarded ledge about ten inches broad, being placed over the tops of the flowers at nights. When supporters are driven into the wall, and such have a turned up end to prevent the board sliding off; it will be found a perfect screen from frost; the boarded protection may be removed during the day, so that no unsightly appearance will be caused by it.

DAHLIAS.—Frequently the surface and crowns of the roots of Dahlias planted high, will be quite exposed from rain washing off the soil, or by other means. If the frost (which often comes keenly and suddenly towards the end of the month,) should operate upon the roots, such would be so damaged as probably to rot them during Winter, or if not so severely affected, probably every eye will be so injured as not one will push a shoot next season. To prevent this damage, let two or three inches deep of soil, or rotten tanner's bark, be spread over the roots close up to the stem of the plant, and extending one foot or more round it; this will obviate the liability of suffering by frost, thus the plants may be permitted to remain blooming till cut off by it. At the end of the month it will probably be necessary to take up the old roots.

DUTCH ROOTS, as Tulips, Ranunculuses, Anemonies, Hyacinths, &c. may be planted at the end of the month. For the proper mode of performing this operation, see the preceding Numbers of the Cabinet.

HERBACEOUS BORDER PLANTS, may now be divided and re-planted. Bulbous-rooted Irises, Lilies, Narcissuses, Crocuses, Snowdrops, &c. that have not been re-planted for the last two years, should be taken up, divided, and be immediately planted again.

HYACINTHS, and other Dutch bulbs required to bloom in pots as early as Christmas, should be planted early in the month; the pots being plunged to the rim in a warm south border or frame, till the bulbs push roots, and then be introduced into a hot bed frame, &c. for pushing them into bloom.

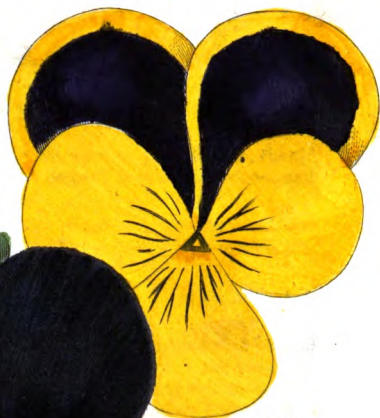
LOBELIAS.—The various kinds of Lobelias grown in open borders in Summer, and requiring protection in Winter, such as *L. fulgens*, *splendens*, *speciosa*, *cardinals*, &c. should now be taken up and potted. This attention will be more necessary in cold parts of the country, as in warm climates; the above plants will endure our Winters, and in that case, Spring is the best time for dividing the offsets from the parent plant.

PINKS.—One or two year old stocky plants of Pinks grown in the open borders, if taken up and potted, may be introduced into heat from the beginning of December, and will bloom early in Spring.

ROSE TREES.—Plants established in pots, now taken into heat, will bloom at the end of December, or early in January.



Maid of Athens.



Prince George.



Thompsons Favorite.



Fuchsia elegans.



Cartwright's Prince of Orange.

J & J. Parkin, Sculp.

THE
FLORICULTURAL CABINET,

NOVEMBER 1ST, 1833.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Gardenia florida.*

By ARISTIDES.

I have purchased and perused the different Numbers of your *Floricultural Cabinet*, and *Florist's Magazine*, with great satisfaction; and if I have not received instructions from them, it is not the fault of your correspondents, or yourself. But being anxious to encourage your Magazine, as well as to assist in the diffusion of information, as far as my experience and ability will permit, induces me to pen the following detail of my method of cultivating those very fragrant exotics, the *Gardenia florida* and *radicans*, which, on your reception, should you judge worthy a place in the *Cabinet*, I shall feel highly flattered by its insertion therein.

The compost I prefer is a mixture of the following ingredients: two parts turfy peat, two ditto leaf mould, one ditto turfy loam, and one ditto pit or river sand, free from oxide of iron—well chopped and incorporated together before using, but not sifted.

Propagation.—About the end of March I take as many cuttings of the young and half-ripened wood as I want young plants, at from an inch to an inch and half long, and prepare them by dressing off a few leaves at the bottom end, and cutting a section close under the lowermost joint, with a sharp knife. I then take a pot of a size suitable to the quantity of cuttings, and fill it to within three inches of the top with broken pots. Over these I place a thin

layer of moss (*Hypnum*), and fill up the pot with the above compost. I then proceed to put in the cuttings one inch apart; they are made pretty firm, and a little water is given to settle the soil. I plunge the pot in a hot-bed frame, where there is a gentle bottom heat, and water, and shade from the sun, as appears necessary.

Cultivation.—When the cuttings have taken root, and commence growing, I place them in the most airy part of the frame for a few days to harden, before they are potted off singly. I always use the above compost, and small 60-sized pots, for the first potting; and am particular to have them well drained with potsherds, or cinders broken small. When they are potted off, I give a little water, replace them in the frame, and shade them for a few days, until they have taken fresh root.

They will require to be shifted into larger-sized pots early in June, and again placed in the frame, or some other moist heat of not less than 70 degrees of Fahrenheit's thermometer. They will make rapid progress, and shew plenty of blossom-buds; but I find it advantageous to pick them off until the plants are well established, say twelve months old. At the end of October I remove them to the greenhouse, where they remain in a dormant state through the winter.

In the succeeding spring they are again potted, at the same time as the old plants, which should never be later than the end of March, and afterwards treated in the same manner, *i. e.* keeping them in a humid atmosphere of 70 or 75 degrees from March to October, and supplying them plentifully with clean water over the foliage, and at the roots with water that holds sheep or deer's dung in solution.

When they are in bloom, I remove them to the green-house or conservatory, where they remain refreshing the air with their balmy fragrance until they have done flowering.

By the above treatment, I have had these plants in greater perfection than I ever saw elsewhere, and I am confident that if any person follows the same plan, he will be amply repaid for any extra trouble he may be at, with a profusion of those beautiful and delicate flowers so characteristic of these plants.

You may expect to hear from me again shortly.

Sept. 16th, 1833.

ARISTIDES.

ARTICLE II.—*On the Cultivation of Hyacinths.* By
INNOVATOR.

I herewith send you what I have found after numerous experiments to be the best method of growing Hyacinths. In selecting your bulbs be sure to choose such as are *large and conical*; these are absolutely necessary, as all flat crowned bulbs invariably break into offsets and produce flowers not worth looking at, and small bulbs are worse than useless. The next thing is the preparation of compost, which should consist of one barrowful of sea-sand, wet with the salt water; one peck of leaf mould; two pecks of finely sifted night-soil; and two pecks of fine rich mould, to be found in any ditch at the foot of a hill where the water settles from off a well-frequented road. Having mixed and passed these two or three times through a fine sieve, take your pots, which should be twelve inches deep and six broad inside; place an oyster-shell over the hole, and over that an inch of well-rotted cow-dung; then fill the pot to within three inches of the top with the above compost; strike the pot smartly upon the board, to settle the earth in it; then put in half an inch of white sand, and upon that place the bulb; cover it with sand, and fill the remainder of the pot with compost; having finished planting, plunge the pots in the ground in some airy place of the garden, so that their tops are 8 inches under ground; sift some light sandy earth over them, till it becomes level with the surface. Here they may remain till the flowers begin to shew colour, being protected by hoops and mats from heavy rains and frost. As soon as they begin to expand their flowers, I should advise their removal into a green-house or cold frame, and shaded from the sun. Supply them with plenty of manured water when in flower, and they will continue their beauty for at least a month. Where sea-sand cannot be procured, it may be imitated as follows:—Take a barrowful of drift sand, and wet it with the following—common salt, 12 oz.; muriate of lime, 2 oz.; sulphate of soda, Epsom salts, and muriate of magnesia, of each 6 drachms; pour upon these 5 gallons of hot water, and when dissolved wet the sand with it.

It is necessary, in growing Hyacinths, to have two sets of bulbs, one for pots and the other for a bed to be made of the same compost as used for pots, and using the bulbs alternately, or they soon

deteriorate. To such of your readers as may be ignorant where to get good foreign bulbs, I should say, go to CHARLWOOD, 14, Tavistock-row, Covent-garden, where you are sure to get what you order.

INNOVATOR.

Sept. 10th, 1833.

ARTICLE III.—*On piping Pinks.* By SNOWDROP.

Although it is very desirable that successful variations of culture should be recorded, yet, as the humble florist not possessed of a superfluous abundance of those means necessary for carrying minute detail into execution, may not be deprived of the pleasure of raising flowers himself, I shall upon this, and any other occasion that occurs, when in my power, give a simple method of producing the same effect. The modes pointed out by Mr. REVELL and INNOVATOR are both no doubt very excellent, but Pink, Carnation, and Picotee pipings will succeed nearly as well when pricked out in the open ground as when reared under glass; they will only require more time to root. The situation to be chosen is the chief thing to be considered. This must be entirely shady. The earlier the piping is commenced, the greater will be the chance of success; and constant but light watering in dry weather will be required. Those who are not dexterous at piping may plant slips, with very nearly equal success. To guard against worms, which are great plagues, INNOVATOR's plan of a layer of lime and ashes under the mould is doubtless very useful.

SNOWDROP.

ATTICLE IV.—*On the Culture of Fuchsias in the open Border.* By A JERSEY GARDENER.

From a perusal of the *Cabinet*, I observe a number of correspondents appear anxious to know the culture of that beautiful family of plants, the different varieties of Fuchsias; and other persons appear equally anxious to give their opinions and practice on the subject. Therefore, among the rest, I shall endeavour to offer a few remarks on the same class of plants; and if you deem them worth inserting in your valuable little work, they are perfectly at your service, as well as any other result from experience

that may come under my notice, and which shall be forwarded to you from time to time. I should not have troubled you with these remarks but from the certainty of the advice already given in your pages being very little calculated to meet the wishes of an amateur, or any other person who may be desirous of growing these beautiful plants to perfection with as little trouble as possible. However, before I offer you my own experience, I must beg to say a word to S. J., in the March Number of the Magazine, page 7, as he does not seem to write like a practical gardener, unless he has got a great deal of spare room in his greenhouse, which is not the case with every one, especially those which have only a small frame, or room, to strike them in for the winter months; for he recommends taking off young shoots in the month of September, and to insert them in a pot filled with sand, and strike them in a hot bed, and when rooted to pot them off in 48-size pots, which is certainly very absurd in at least three different ways. The first is in recommending a hot bed to strike the cuttings in, which is a thing not every where to be met with at this time of the year; consequently, those that have no hot bed must have no Fuchsias. under this system. In the second place, it is absurd, being a bad time of the year; for it would be at least near November before they would be fit to pot off, which is in general a dark cold month, not a very congenial time to remove young tender plants just rooted from a hot bed and transplant them, and then immediately put them into a cold greenhouse, where they will be at the risk of being damped off. And thirdly, in recommending 48-size pots to put them in whilst in this young state, as nothing can be more injurious to young tender plants than to over-pot them at first. If he had recommended thumb-pots, or small 60's, I think it would have been more compatible with common sense; for the plants would be much healthier, and a great deal of room saved.

But I will now proceed to lay before you my mode of treatment, and I believe I grow them as fine as any in England. I have plants now of the *Fuchsia gracilis* in full bloom, which are eight feet high, all the growth of this summer. About the first week in May, I prepare my border; if poor, I put in a good quantity of rotten vegetable mould, dig it well down, and level the border. I then make a good sized hole, and work up about one-third sea-sand (if to be had—if not, good drift sand will do) with about two-thirds

rotten leaf mould, which I work into the bottom of the hole. I then select a stout woody plant, if to be had, and turn it out of the pot with the ball entire, and fill up the hole with the same compost as used for the bottom, which will make the plant shoot tolerably free the first summer. I let the plants remain out all the winter without any further trouble, as all the sorts will endure the cold of winter, excepting *Fuchsia arborea*, which I find the tenderest of the whole tribe, and I have 18 sorts; for although *F. excorticata* has been considered by many as a stove plant, I have now plants about five feet high, and six in circumference, which have stood out two winters without the least protection. But this of course could not be expected in the north of England. I differ from Mr. SHARMAN's mode of cutting them down in the autumn. The sap then being often in full circulation, it renders them more liable to be injured by the frost, although they might be covered up, as the wounds are continually oozing out the sap, which consequently causes them to shoot weaker in the spring, if they are not even killed by the frost. I let them remain all the winter without cutting. About the beginning of April, I cut them close down, which causes them to throw up an abundance of young shoots, which, when about a foot high, instead of thinning, I take some compost as directed above, viz. leaf mould and sand, and lay round the roots. I then bring down as many of the young shoots as I think proper, tongue them on the upper side, and peg them about three inches beneath the soil, leaving about five or six shoots to run up for flowering, according to the size of the plant. In about six weeks, I have an abundance of well-rooted young plants, about a foot high, which I take off and pot in 48-size pots, and place them in a cold frame, being careful to shade them while the sun is upon the frame. Thus, in about two months, I obtain a lot of fine young plants, which flower through the whole summer; saving myself the trouble of making hot beds, potting in 48-size pots, and keeping them in the greenhouse all the winter, a process of more than six months' attention.

I hope my remarks will not offend S. J., as it is not my intention to do so. I should have made these remarks before, but it did not come under my particular notice.

A JERSEY GARDENER.

NOTE.—We shall be much obliged by a continuance of favours from our respected correspondent.—CONDUCTOR.

ARTICLE V.—*On the Culture of Pansies, (Viola tri-color.)* By the CONDUCTOR.

Amongst the beautiful and ornamental plants of the flower garden to which the attention of Floriculturists has of late years been directed, may be ranked as truly interesting and attractive, the very striking, humble, and most lovely varieties of Pansies. There can scarcely be any end to the varieties that can be raised, as they produce seeds so very abundantly.

Within the last six years nearly two hundred very handsome and distinct varieties have been raised. An extensive collection of the most superb kinds are cultivated for sale by Mr. Hogg, Florist, Paddington, near London. Doubtless each successive season there will be additional splendid varieties raised, and judging from the past, we may unhesitatingly say, we are only in the dawn of the *Viola* era, and that ere long they will become a conspicuous ornament to flower gardens in general. Pansies not only recommend themselves to notice by the brilliancy and variety of colours, and the profusion of flowers they produce, but also, by attention to culture, they will exhibit a duration of blooming from May to November, which includes a period of at least seven months. The facility with which all the kinds can be propagated, and the very little attention they require afterwards in culture, are additional recommendations.

Viola is from the greek, *Ion* : Nicander in his *Geoponicks* states, that the Grecians called it *Ion*, because certain Nymphs of *Ionica* gave that flower first to Jupiter. Others say it was called *Ion*, because when Jupiter had turned the young female whom he loved into a cow, the earth brought forth this flower for her food, which being made for her sake, received her name. Such is the incredulous, fabulous account of its name. *VITRUVIUS*, in his seventh book on *Architecture*, states, " That the azure of Athens colour is made from violets. The dyers, he says, when they would counterfeit sile, or azure of Athens, put the dried violets into a vat, kettle, or cauldron, and boil them with water, afterwards when it is tempered, they pour it into a linen strainer, and wringing it with their hands, receive into a mortar the liquor coloured with the violets ; and steeping earth of *Erethria* in it, and grinding the same, they make the azure colour of Athens. By adding milk to it, they make the gallant purple."

The *Viola tricolor* has been known in this country by a variety of names, as Herb Trinity (in allusion to the three colours frequently contained in one flower), Heart's-ease, Pansies, Love in Idleness, Cull me to you, Cull me sweet, and Three Faces under one Hood.

MATTHIOLUS says that the Pansey is found growing in a wild state on Mount Baldus, in Italy; and LOBEL says that it grows wild in Languedoc, in France. It is also said to grow wild in Japan. Nevertheless, it is generally considered to be a native of England, at the first found growing upon the tops of high hills. GERARD adds, that in his time he had not seen the same, from which it appears that the plant was not at that period very general in this country in a wild state, if even a native.

Culture.—New kinds are raised from seed; this may be collected during most of the summer months. Seed gathered at any time up to September, may be sown immediately. The plants will then have sufficient time to be firmly rooted before winter, and not be liable to be cast out by frost, nor to damp off. The seed should be sown in a shady situation, upon a bed of light finely sifted soil. After sowing the seed, sift a little mould over, so as to cover it, and no more; then gently press the surface with a flat board, to cause the seed and soil to adhere together, by which means the former will more certainly vegetate. The plants will generally appear in a week or ten days. When they are about an inch high, they should be transplanted into the beds in which they are intended to flower, four inches apart. Choose an open, sheltered situation. The plants will flower the following spring.

Seed gathered after the first of September had better be reserved for sowing the following April, unless sown in pots or boxes, and thus be able to protect the young plants from the severity of frost.

It sometimes happens that if the seed be left on too long, the pods are apt to burst open, and to scatter it on the ground, where numerous young plants will spring up in the autumn, particularly if a little fine mould be strewed on the surface round the old plants. These seedlings may be taken up any time in September, or the beginning of October, and planted out in beds to flower the spring following, when the finest may be selected for keeping, and the inferior ones cast away. Several of course will resemble the

mother plant, but I have no doubt that the same pod of seed will produce many different varieties, both in colour and shade, as well as in the form and size of the petals. Mr. Hogg informs us that he gathered several pods of seed the early part of June last, which he hardened for a few days in the sun, and then sowed them in large pots, which he kept moderately moist in a frame, and shaded during the middle of the day when necessary.

These plants were pricked out in the ground about the middle of August, and many of them are now coming into flower, and are of the choicest description. The largest flowers are generally found on young vigorous plants, and in the earliest part of the season, many will measure $2\frac{1}{2}$ inches in length, and 2 inches across the two upper petals; the colours, variegation, and pencilling are then more uniform and regular than they are towards the end of summer. The prevailing colours of the Pansy are purple, both light and dark, as well as red and blue shaded, white, orange, and yellow of different shades, and these often separate on distinct flowers, which are called self or plain coloured; but more frequently two, three, or four of those colours are combined and distinctly marked on the same flower. It is this singular combination of colours that heightens their beauty, and distinguishes one variety from another. Some come of a reddish bronze or copper colour, as in the one named the "Copper Captain"; as if a purple flower had been impregnated with an orange one, or *vice versa*. I have seen a beautiful seedling this summer, marked with five distinct colours: the two upper petals were of deep purple; the two next or middle ones were of pure white, with a light blue, or azure-coloured, blotch or spot on each; and the bottom petal near the eye, as far as the pencilled lines extend, was of deep orange; the remaining part was buff, with a triangular purple spot at the end.

Pansies grow very readily, and soon spread widely. When the plants thus extend, the soil being exhausted, and the stems smothering each other, the overgrown roots produce only small flowers. It is therefore necessary, in order to have fine flowers, frequently to renew the plants.

Propagation by cuttings, to be successful, ought to take place at the end of May, or early in June. If left till July or August, the success will be hazardous, because the flower-stems get hollow and pithy. The readiest and most certain way is by layers, and

making a slight incision in the joint in either of the above-named months. The cuttings may be placed singly in thumb-pots, in a little light sandy mould and well-rotten dung, and set in a cucumber frame, which is at work, to be kept moderately moist and shaded; or they may be stuck in the ground under a common hand-glass, with coal-ashes under, to prevent the worms casting them up; but if placed on gentle bottom heat, the glass ought by no means to be shut down close, or they will be very liable to damp off. Propagation by dividing the roots may be done in moist weather, any time from July to September. The plants thrive best in well-manured loam, in a shady situation, and preserve their flowers longer; though they will grow and flower abundantly in almost any situation.

Collections of Pansies have been exhibited this summer in most of the Horticultural Meetings, which have taken place in different parts of the country. Their cultivation is at present a favourite pursuit with many of the fair sex, who seem to find pleasure in raising new varieties.

CONDUCTOR.

PART II.

EXTRACTS.

Plants figured in the following Periodicals for October:—

Curtis's Botanical Magazine, 3s. 6d. coloured, 3s. plain. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow.

1. *Lychnis Pyrenaica*, Pyrenean Catch fly. Class, Decandria; order, Pentagynia; natural order, Carophyllææ. An highly interesting plant, well suited to ornament an alpine border or rock work. It succeeds well likewise when grown in a pot. The plant is an inhabitant of rocky places in the Bassee Pyrenees. It is perfectly hardy, and grown in the Glasgow Botanic Garden. Flowers: grows in forked panicles of from three to six flowers in each panicle. The flowers are small, delicate, and of a pale rose colour. *Lychnis*, from *lychnis*, a lamp; the down of the leaves appearing as wicks.

2. *Pimelea arenaria*, sand Pimelea. Diandria, Monogynia. Thymelææ. A small erect shrub, branched in a forked manner, the branches hairy. Mr. ALLAN CUNNINGHAM states, "This interesting *Pimelea* I found growing on the bare, exposed sandy ridges at the entrance of the river Hokianga, on the western coast of the northern island of New Zealand, where it was observed in

flower in the mouths of September and October, 1826. It was introduced by Mr. CUNNINGHAM in 1827 to the Royal Gardens at Kew, where it has bloomed. Flower capitate, terminal, pure white. *Pimelea*, see page 60.

3. *Plagianthus divaricatus*, spreading. Monodelphia, Decandria. Euphorbiaceæ. This plant was found in New Zealand by Mr. ALLAN CUNNINGHAM, and introduced into the Kew Gardens. It bloomed there in May, and fruited in July, 1833. It is a shrub that has little to recommend it on the score of beauty, but from its variety and structure. Flowers, yellowish, about an inch across. *Plagianthus*, from plagios, oblique; and anthos, a flower, from an obliquity or irregularity of the petals.

4. *Beaufortia Dampieri*, Dampier's *Beaufortia*. Polyadelphia, Polyandria. Myrtaceæ. Apparently a dwarf shrub, with many opposite, or subverticillate, tortuose, and sometimes reflexed tetragonal (taken in conjunction with the leaves) branches, which when the leaves are fallen away, are quite rough, with prominent teeth and scars. Leaves small, coriaceous, closely placed, beautifully quaternate, generally reflexed. A rare plant, and one of the few shrubs that are to be found upon the barren, loose, sandy downs of Dirk Hartoy's Island, off Sharks Bay, on the West Coast of Australia, where seeds were gathered in 1822, during the surveying voyage of Captain P. P. KING, from which plants were raised and flowered at Kew Gardens. It is the same plant which the celebrated Navigator, DAMPIER, gathered in 1669, on the sterile shores of the neighbouring main, namely at Sharks Bay. The flowers are numerous, collected in whorls below the extremity of a branch, very pretty. Petals small, yellow, or brownish green, reddened towards the apex. Filaments, pale rose, very conspicuous in colour. Its fruit is as big as a pepper-corn, almost round, of a whitish colour. Culture: requires the greenhouse, and is increased by cuttings. Soil: sandy peat and loam. *Beaufortia*, in honour of MARY, Duchess of BEAUFORT, a Patroness of Botany.

5. *Lysimachia Azorica*, Azorian Loose-strife. Pentandria, Monogynia. Primulaceæ. This extremely pretty *Lysimachia* was secured at the Glasgow Botanic Garden, from that at Copenhagen, under the name here given, whence it would appear to be a native of the Azores. It is cultivated in a pot, and treated as an Alpine plant; that is, protected from the fickleness of our winters, and kept in a cool, shady situation in the summer; and in June a pot filled with this little plant is quite a beautiful object; for the peduncles are so long as to elevate the bright and comparatively large bright yellow flowers, above the tops of the stem and the delicate green foliage, *Lysimachia*, from *Lysis*, dissolution; and *mache*, strife.

6. *Cargillia australis*, Southern *Cargillia*. Octandria, Monogynia. Ebenaceæ. A much branching shrub. An inhabitant of dense shaded woods on the coast of New South Wales, as well as on the banks of the principal rivers of that colony, between the parallels of 27 and 35 degrees, where it forms a large shrub, and is usually to be met with in fruit in the winter season. Introduced by Mr. CUNNINGHAM to Kew, in 1825, from Port Jackson. Flowers: of a yellowish white, small; increased by cuttings. Soil: sandy peat and loam. *Cargillia*, named in memory of JAMES CARGILL, a Physician of Aberdeen, and a contemporary of Caspar Bauhin.

7. *Tillandsia setacea*, setaceous (bristly) leaved. Hexandria, Monogynia. Bromeliaceæ. A Parasitical plant growing on the trunks of trees. Stem, scarcely any. Leaves, numerous, imbricated, a foot long. Among a valuable collection of Jamaica plants received into the Glasgow Botanic Garden, from Mr. SMITH, was the present truly fine species of *Tillandsia*, which blossomed in May, 1833. The flowering stem elongates itself into a leafy scape, scarcely a foot in length, formed into a spike of scales; these scales are coriaceous, and the edges are of a beautiful red. From each of the scales arises a single flower in succession, one only being in perfection at a time, and continuing for a day. Entire flower, two inches long. Calyx, pale yellow. Petals, white, purplish inward. The spike appears very richly variegated with red and yellow. *Tillandsia*, in honour of ELIAS TILLANDS, a Swedish Botanist, and Professor of Medicine in the University of Abo.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Esq.,
Professor of Botany, in the London University. Coloured
4s., plain 3s.

1. *Gongora maculata*, spotted. Gynandria, Monandria. Orchideæ. This most curious species was introduced from Demerara, in 1832, by Mr. THOMAS MOSS, of Otterspool, and is cultivated in the hothouse of RICHARD HARRISON, Esq., Liverpool, where it bloomed in May, 1833. Its bunches of flowers were two feet and a half long, and hung down most gracefully from the pot in which the plant was suspended. Flowers: petals, pale purple, with darker spots; column, green, with dark spots; sepals, brown and purple spots.

Many a strange figure has been met with among Orchideous plants, and numerous are the animal forms which botanists have fancied they could recognise among their singular flowers. Some are said to bear little men and women swinging below their canopy of petals. Others have appeared to carry the likeness of lizards, frogs, and other reptiles, crouching among their leaves; while some have been compared to Oberons and Titans hanging by their tidy arms from the bells, where they have concealed themselves. To what the flowers of the plant above-named can be likened we profess not to know, unless to some of the fantastic animals of heraldry. A griffin *segreant*, as they term it, would do as well as any other for a comparison.—J. LINDLEY.

Gongora, in honour of D. ANTONIO CABALLERO Y GONGORA, Bishop of Cordova.

2. *Erythrina poianthus*; var *subinermis*. Thornless naked-flowering Coral Tree. Diadelphia, Decandria. Leguminosæ. According to Mr. LOWE, this plant is a great ornament of the gardens of Madeira, where it is cultivated, and where it becomes a low tree 15 or 20 feet high, with a trunk sometimes four feet in circumference, and so soft that its wood resembles cork. Its branches are said to strike root with great readiness; so that a piece, however rudely broken off, will grow when stuck into the ground. The plant has bloomed in this country in the stove of his Grace the Duke of NORTHUMBERLAND, at Sion; it was six feet high, had a richly streaked bark, and was crowned by a thick cluster of leaves and deep scarlet flowers. *Erythrina*, see page 58.

3. *Sauroglossum elatum*, Tall Lizard's Tongue. Gynandria, Monandria. Orchideæ. A stove-plant, requiring to be cultivated in earth, like other terrestrial Orchideæ of the Neottia tribe, to some of which, such as *Spiranthes grandiflora* and *Pelexia spiranthoides*, it bears a good deal of resemblance. Its structure is, however, distinctly different from that of any published genus. The present plant is a native of the woods of Brazil, whence it was sent by Mr. HENRY HARRISON. Flowers: sepals, green; labellum, white. *Sauroglossum*, so named from *sanga*, a lizard; because many of the parts of this ærious plant may be likened to the tongue of some reptile.

4. *Aster concinnus*, Neat Aster. Syngenesia, Superflua. Compositæ. A native of the plains and woodland of North America, from New York to Pennsylvania, according to PURSH. In the gardens in this country it is a common hardy perennial, growing about three feet high, and flowering in September and October. Flowers: lilac. For those who have gardens, this is one of the most worthy of cultivation, because of the gay colour of its flowers, and its neat appearance. The stem is generally tinged more or less with purple. *Aster*, see page 138.

5. *Calceolaria purpurea*, purple flowering. Diandria, Monogynia. Schrophularinæ. An herbaceous species, but seldom seen in collections, being of little interest to the florist, on account of its delicate constitution and want of beauty. It is probably in its native soil a perennial; but it is scarcely better than a biennial when cultivated, from the great difficulty of preserving it alive through the winter. It succeeds best in a pit or cold greenhouse, but not so well in the open air; and is increased by seeds or offsets. This species is a native of Chile, where it was found near Valparaiso, by Mr. CUMING; and in the Cordillera, by Mr. CRUCKSHANK, to whom we are indebted for its introduction. *Calceolaria*, see page 60.

6. *Collomia coccinea*, Brick red Collomia. Pentandria, Monogynia. Polemoniaceæ. A hardy annual, resembling *Collomia linearis* (see page 181), from which it is distinguished by its deep red flowers, and by the frequent division of the points of the leaves into three sharp segments of unequal length. It is a native of Chile, whence its seeds were brought by Mr. CUMING. If sown thick in a large mass, it is tolerably pretty; but single plants have very little to recommend them. It is, however, a good plant to mix with other flowers for bouquets. The seeds should be sown in March in the open border, when the flowers will appear in June; if again sown shortly after that time, a second crop of flowers may be had in September and October, seasons which suit it best. The plant is grown in the London Horticultural Society's Garden. *Collomia*, see page 181.

Sweet's British Flower Garden, coloured, 9s.; plain, 2s. 3d.

Edited by D. DON, Esq., Librarian to the Linnæan Society.

1. *Clarkia elegans*, elegant Clarkia. Octandria, Monogynia. Onagrarieæ. It was discovered by Mr. DOUGLAS in California, and introduced last year to the gardens of the Horticultural Society. It is a hardy annual, producing seeds abundantly, of very easy culture; and is taller and more straggling than *C. pulchella*, and much inferior to it in beauty. Clarkia, from Capt. CLARK, who accompanied Capt. LEWIS to the Rocky Mountains.

2. *Mimulus roseus*, pink Monkey-flower. Didynamia, Angiospermia. Scrophularinæ. This very distinct species was discovered by Mr. DOUGLAS, in Northern California, and but recently introduced by him to the garden of the Horticultural Society. The plant is a perennial, with a somewhat woody stem, and is increased by cuttings or seeds. It thrives well in the open border during the summer months, but it should be protected in the greenhouse during winter. The flowers are produced, but sparingly, in the bosom of the leaves. *Mimulus*, from MIMO, an ape; the seeds appearing like the face of an ape.

3. *Pentstemon ovatus*, ovate-leaved. Didynamia, Angiospermia. Cheloneæ. The whole plant of a dark green. Stems upright, from one to three feet high. Leaves oval or cordate, acute, serrate with sharp nearly equal teeth. Flowers numerous, rather crowded, disposed in a thyrsiform panicle; of a bright azure blue, afterwards changing to purple. A hardy perennial, native of lime-stone rocks on the high mountains about the Grand Rapids of the Columbia River, from whence it was introduced by Mr. DOUGLAS to the garden of the London Horticultural Society in 1826. It delights in a calcareous or light loamy soil, and is increased by slips or by seeds. None of this genus of plants equals the present species in richness of colour. *Pentstemon*, from PENTE, five; and stemon, stamen.

4. *Lupinus ornatus*, Ornamental Lupine. Diadelphia, Decandria. Leguminosæ. A native of mountain valleys on the Columbia River, where it was discovered by Mr. DOUGLAS, and introduced by him to the London Horticultural Society's garden in 1827. Flowers numerous, varying from a bright blue to a pale purple; the disk of the *vexillum* white, with a yellow spot; *keel* white, with a dark purple point. A hardy perennial, flowering from May to October; delights in a sandy soil. Grown by Mr. KNIGHT, Nurseryman, King's Road, Chelsea. *Lupinus*, see page 116.

The Botanic Garden. Monthly, 1s. 6d. large; 1s. small, coloured.

Edited by Mr. B. MAUND.

1. *Viola tricolor*, Heart's ease; variety, Lady Bath. Pentandria, Monogynia. Violariæ. A native of Britain; perennial; inhabits corn-fields; height, six inches; flowers from April to October. A very beautiful variety,

raised by Mr. WHEELER, of Warminster. Colour: purple, yellow, white, and blue. A rich light soil, and a rather cool and shady situation, with occasional watering in hot weather, will be found conducive to the production of fine and well-coloured flowers.

2. *Verbena radicans*, rooting vervain. Didynamia, Angiospermia. Verbenaceæ. A native of Chile; perennial; introduced in 1832; height, 6 inches; flowers from June to September; colour, rose. As the joints take root, in August cut them off, pot them, and keep them in a cold frame during winter. Turn them out in April, into a light rich soil, and warm as peat, and they will quickly become ornamental. The name of this genus was one applied by the Romans to some of their altar herbs; *radicans*, from the Latin *radix*, a root, is a term suggested by its habit of emitting roots from the joints of the stems.

3. *Hunnemania fumariæfolia*, fumitory-leaved Hunnemanian. Polyandria, Monogynia. Papaveraceæ. A native of Mexico; annual; introduced in 1827. Flowers from June to September; colour, yellow. Sow its seeds in autumn. The young plants will bear full exposure through a mild winter; but for security against disappointment, a pot of seedlings should have occasional protection. Cuttings do not root; nor is division generally practicable. Hunnemanian, from J. HUNNEMAN, a zealous botanist.

4. *Catananche cærulea*, two-coloured Catananche; variety, bicolor. Syngenesia, Polygamia æqualis. Compositæ. A native of South Europe; perennial; hybrid origin; height, two feet and a half; flowers from July to September; colour, white and purple. The present variety originated in the garden of Mr. SMITH, nurseryman, of Worcester. The word *Catananche* is compounded from the Greek language, to imply compulsion, or powerful impulse, in allusion to an imaginary quality formerly attributed to it. The specific name, *cærulea*, signifying blue, was given to the original plant.

On the Culture of the Rose. By J. MANTELL.

The Rose thrives best in a rich, strong, loamy soil, and is generally propagated by layers, when the true sorts are intended to be preserved. The *Banksia*, *Noisette*, and *Rosa indica*, with its varieties, are propagated by cuttings. The Province, or cabbage-rose, may be increased by suckers; and when standards, or a variety of coloured flowers, upon the same tree are required, then budding or grafting must be had recourse to.

Propagation by seed is practised where new varieties are wanted: the seeds are usually sown about the latter end of February, and will come up about the middle of July; the young seedlings may be separately planted out the following spring.

The operation of layering is thus performed:—About the beginning of July, just when the tree is coming into flower, being provided with a sharp knife and a few hooked pegs, commence by taking hold of the shoot intended to be layered, and making an incision just below the bud, on the upper side of the branch, pass the knife half way up to the next bud; then give the branch a slight twist, that the part so cut may rest upon the soil; fix in the peg, to hold the layer in its place, and cover it up with soil, to about the depth of two inches. The custom of layering without the incision so greatly retards the striking of the roots, that frequently they cannot be detached from the stools till the following spring; whereas, if the incision be made, they will be ready, in favourable seasons, in two or three months.

Cuttings, planted in leaf mould and light loam, in the month of May, and placed in a northern aspect, under a hand-glass, strike root readily, and may be potted off in the autumn. There are very few, except the China Rose and its varieties, that succeed by this mode of propagation.

Suckers.—All the common varieties admit of being propagated by suckers or by division of the root.

Budding is usually performed in the month of July, and by this operation it is supposed that the flowers are rendered more brilliant and durable. Al-

though tolerable success may attend the operation when performed in July, some prefer delaying it until the beginning of August, as by this method the buds will remain dormant during the winter, and will produce more vigorous shoots the following spring than those which were budded at an earlier period; the latter being liable to be injured by severe frosts, from the imperfect ripening of their young wood, before the winter season commences. The common dog-rose, transplanted from copses and hedges, any time from the middle of October to the end of November, furnishes the best stocks for standard roses. In making a selection, those should be preferred which are straight and vigorous, and they should be headed down at the time of transplanting to the height required. In the spring, when they begin to shoot, the superfluous buds should be removed, leaving only three or four at the top to form the head of the tree. As the summer advances, the stocks will require to be staked, and constant attention must be paid to disbudding, and to the regulation of the young shoots, by occasionally pinching off their tops. Early in July, the thorns in those parts of the young wood where it is designed to make incisions for the buds, should be removed. Budding on the young wood is recommended, because, by putting three or four buds on as many young shoots, a handsome head will be obtained sooner than by any other method; but if these shoots be too slender, the operation may be performed upon the old wood when the bark separates freely; for, if the bark does not rise with facility, owing to a deficiency of sap, there will be considerable trouble in inserting the bud at all; and should that difficulty be overcome, the pains would even then be lost, for the bud would almost certainly perish from want of sufficient sap to nourish it. In arid situations, or in dry summers, watering the stocks copiously, for two or three weeks previously to budding them, will give strength to their shoots, and ensure the bark rising freely; which latter point is very essential towards obtaining complete success.

In preparing the bud, it is necessary to adhere to the common practice of removing the bit of wood attached to the bark, which is taken along with it from the scion. Omitting to do this saves much trouble, and the unfailling success attending the mode has been established and confirmed by the results of repeated trials. Cloudy weather, or the evening, should be chosen for inserting the buds—an operation which ought never to be attempted under a hot sun, or during cold east or north-east winds. The rose may be budded *in spring* with complete success, if the buds are extracted with a small portion of wood adhering to them. For this purpose scions are cut before winter, and stuck into the ground till spring, when the bark of the stock will run. To prepare the bud, a transverse incision is made in the wood, a little below an eye, which incision is met by a longer cut downwards, commencing at a short distance above the eye, care being taken that a portion of wood is removed with the bark. This bud is inserted into the bark of the stock, which is cut like an *inverted L*; the horizontal edges of this cut in the stock, and of the bud, must be brought into the most perfect contact with each other, and then bound with waterproof bass, without, however, applying grafting-clay. Eight days after the insertion of the bud, the stock is pruned down to the branch, which is immediately above the opposite side, and this branch is stopped by being cut down to two or three eyes; all the side wood is destroyed, and when the bud has pushed its fifth leaf, it is compelled to branch by pinching its extremity, and will then flower in September of the same year.

Roses may be propagated by grafting as successfully as by budding. In Flanders, cleft grafting is adopted, and care taken that the scion is of the same diameter as the stock, or the cleft in the stock made sufficiently near one side of the cross section, that the bark of the scion may fit the stock on both sides. This mode is adopted for grafting one sort of garden rose upon another. In grafting upon the dog-rose, the same practice is followed, with this addition, that a shoulder is very often made to the scion, so that it may rest with greater firmness upon the stock, such stocks often being employed as standards, and therefore more exposed to wind. The grafts are tied with fine bass, made waterproof, by passing it first through a solution of white soap, and next through one of alum, a neutral compound being thereby formed, insoluble in water. In this country, where the summers are not quite so hot as in Flanders, common grafting-clay may be used.

In pruning roses of every kind, the shoots are annually shortened to nine inches; this process rendering the tree highly productive of wood and flowers. The operation is performed about the end of January, and all the wood of four years' growth entirely cut out. To retard the blooming season, and to cause roses to flower in the autumn, they are pruned back in the spring, as soon as the flower-buds can be discovered; and these not being renewed till late in the autumn, the flowering season is considerably prolonged.

The rose is much infested with insects, particularly the *Aphis Rosæ*, which, however, may easily be destroyed if the trees are in a house, by fumigating with tobacco, or if in the open air, by making a solution of quick lime, soot, and water, in the proportion of one peck of each to ten gallons of water; after being well stirred together, and left standing until the water has become quite clear, take it out with a watering pot, and mix with it about one-sixth of strong tobacco-water, which, if applied to the roses with a syringe, will effectually destroy the *Aphides*, and generally the larvæ of other insects, which roll themselves up in the leaves and buds of the flowers.

In conclusion, we may be permitted to advert to a question sometimes asked,—What is the use of flowers? For ourselves, we envy not the mind that could suggest such an interrogatory; the soul cannot sympathise with one whose ideas of utility are centred all in self, and whose heart is inaccessible to the choicest gifts of nature. "What a desolate place," beautifully observes a modern writer, "would be a world without a flower! It would be as a face without a smile,—a feast without a welcome." Think of a world without flowers,—of a childhood that loves them not,—of a soul that has no sense of the beautiful,—of a virtue that is driven and not attracted, founded on the meanness of calculation, measuring out its obedience, grudging its generosity, thinking only of its visible and tangible rewards; think of a state of society in which there is no love of beauty, or elegance, or ornament, and then may be seen and felt the utility of ornament, the substance of decoration, the sublimity of beauty, THE USEFULNESS OF FLOWERS.—*Mantell's Floriculture*, see page 24.

On the History of the Polianthes tuberosa. By F. H. S.

An article on the culture of that most fragrant flower the Tuberose, having appeared in your Magazine, the Number for June, page 86, but no account of its history being there given, I herewith send you an extract from the Transactions of the London Horticultural Society, of which very useful Society I have been a member from the commencement. It is part of a valuable paper communicated by R. A. SALISBURY, Esq.

"The first account that I find of the Tuberose, is in L'ECLUSE's *History of Plants*, where it appears that on the 1st of December, 1594, he received a specimen of it, in very bad condition, from BERNARD PALUDANUS, a physician at Rome, to whom it was sent by the celebrated SIMON DE TOVAR, of Seville. It certainly had not then been many years in Europe, and LINNE, in his *Hortus Cliffortianus*, on this head refers us to PLUMIER's *Genera Plantarum*, p. 35, who says it was first brought by Father MINUTI, from the East Indies, into the senator PEIRESC's garden at Boisgencier, near Toulon. It is much more probable, however, that it was introduced at an earlier period, and from America, for no author describes it as wild in the East Indies; LOUREIRO only found it cultivated in the gardens of Cochin China; and RUMPH says it was unknown in the Island of Amboina, till the Dutch carried it there from Batavia, in 1674. On the contrary, KAMEL informs us, that it was brought to the Island of Luzone, by the Spaniards, from Mexico; and PARKINSON, in 1656, tells us, that the plants, which he describes as two species, 'both grow naturally in the West Indies, from whence being brought into Spain, have from thence been dispersed unto divers lovers of plants.' The senator PEIRESC, as may be learnt from GASSENDI, was only fourteen years old in 1594,

when SIMON DE TOVAR had already cultivated it at Seville, and according to REDONTE, it was not planted in his garden at Boisgencier, by Father MINUTI, till 1652, whom that author makes to have brought it from Persia: I only infer, however, that he travelled from Hindostan over land. REDONTE moreover asserts, that the authors of the *Flora Peruviana* found it wild in America, but in the work itself they say, cultivated in gardens. HERNANDEZ' evidence, however, I think, takes away all doubt about the matter: he says, 'provenit in frigidis et temperatis regionibus, veteri incognita mundo,' and as the Agave, to which the Tuberose is more immediately allied, is also a native of Mexico, I am fully of opinion that it is indigenous there.

"The description given by the venerable L'ECLUSE of his specimen, half dried, and battered by the journey, with only the lowest flower of the spike expanded, affords a memorable instance of his accuracy and discernment. The size, the stem, insertion and figure of the leaves, and their hempy texture, are particularly noticed; the shape of the corolla, with its general similarity to that of the Asiatic Hyacinths, but in consistence rather to that of the Orange, is next remarked; and having no knowledge of the root to guide this judgment, but what he derived from SIMON DE TOVAR's appellation of *Bulbus Indicus florem Album proferens Hyacinthi Orientalis æmulum*, he guesses it may possibly belong to the same genus with the *Bulbus eriophorus*, or Peruvian Hyacinth, though not without some doubts raised by its stem being covered with leaves, and its tubular corolla. Two years afterwards, these doubts were corroborated by his receiving roots both from SIMON DE TOVAR and the Comte d'AREMBERG, which by August were full of leaves; and I think it worth noticing, that his figure of the plant appears evidently to have been made up from the original specimen sent by BERNARD PALUDANUS, and one of these growing roots, which he expressly mentions did not flower: he concludes with observing, that if it is still to remain in the genus, it may be called *Hyacinthus Indicus tuberosa radice*.

"From this Latin phrase, no doubt, our silly appellation of Tuberose, and the more accurate French name, *Tubereuse*, originated; but in the East Indies it is distinguished by the poetical title of *Sandal Malam*, or *Intriguar* of the night; in Spain, where, at the period of this plant's being discovered, it was the fashion to give both places and things religious names, it is called *Vara de S. Josef*.

"Soon after L'ECLUSE's figure, an excellent one by VALLET, the embroiderer, came out at Paris in 1603, and both these were copied and published as different species, by SWERTIUS, in his *Florilegium*. An original figure, which has great merit for that day, though not equal to VALLET's, next appeared in the *Theatrum Floræ*, in 1622: it shews many roots flowering in one pot. From FERRARIUS's pompous book on the culture of flowers, we learn it was still regarded as a rarity in the Barberini gardens, at Rome, in 1633, but that it increased abundantly, and was taken out of the ground every year in March, to separate the offsets. Our countryman PARKINSON, more than half a century after its being first described by L'ECLUSE, is the next author who treats of this plant; but valuable as many of his quaint observations still are to the horticulturist, his account of the Tuberose does him little credit; he makes two species of it, saying, he thinks L'ECLUSE never saw the first, though he owns 'some do doubt that they are not two plants several as of greater and lesser, but that the greatness is caused by the fertility of the soil;' his figures are wretchedly copied from SWERTIUS, and by his calling it the Indian knobbed Jacinth, it appears not to have been known here then by its modern name. GASPER BAUHIN, with his usual carelessness, also takes it up as two species from SWERTIUS, and even the learned RAY seems to have known as little about it in 1693, adding, however, to his second species, the title of *Tuberose*.

"I meet with nothing more of any consequence respecting it, till PHILIP MILLER, the pride of every British gardener, published the first edition of his Dictionary in 1731. He makes it a distinct genus from the Hyacinthus, and describes the variety with double flowers, now so common, but then only to be seen in M. DE LA COURT's garden, near Leyden, whose memory is most justly consigned to infamy by our author, for destroying many hundreds of

the roots, rather than parting with a single one to any other person; an instance of narrowness of mind and ill-nature, he adds, too common among the lovers of gardening. I trust no one who belongs to this Society will ever deserve a similar reproach. At this period we find the roots were annually imported into England, along with Orange trees and Myrtles from Genoa; and to the directions there given for blowing them so as to have a succession of flowers from June to October, nothing can be added."

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON A DWARF YELLOW FLOWERING PLANT.—I shall feel obliged to you, or to any of your correspondents in the *Florist's Magazine*, if you will give me the information I am about to ask for. I have three circular beds, in a sunny part of my garden, each four feet in diameter: one is completely covered with *Verbena chamædrifolia* (Melindres); the other is completely covered with a *Lobelia*, I believe *L. erinus*, or it may be *L. gracilis* (light blue); the third is newly made, and I am at a loss what to put in it next spring. I wish to plant it with some flower similar in growth and habit to the above-mentioned *Verbena* and *Lobelia*, but of a yellow colour, and a lasting flower as the *Verbena* and *Lobelia* both are. The *Echscholtzia californica* is too rampant. The Yellow Hawkweed is too high from the ground. The *Lotus corniculatus* would do, but it is very common in our pastures in this neighbourhood. Now I shall feel obliged if you will tell me of any flower of a yellow or rose colour, that, excepting in colour, would, as to growth and duration, be in unison with the *Verbena* and *Lobelia*; or if any of your correspondents will do so, in an early Number of the *Cabinet*; and also what soil will suit. Some of the dwarf *Cistuses* are very pretty, and as to growth, &c. would suit well, but they cease blossoming too early in the summer. *Mimulus moschatus* will not do; it gets to look shabby soon after it is turned out of the greenhouse.—Will you also inform me where I can procure the under-written plants and seeds?

*Calochortus macrocarpus** (bulb), Loudon's Catalogue, page 476, line 30.

Delphinium Menziesii (perennial plant), Loudon, page 482, line 16.

Lupinus Cruickshankii (the seeds), Loudon's Additional Supplement, p. 593.

Stenactis speciosa (the seeds), not in Loudon's or Sweet's Catalogue.

Collomia grandiflora (seeds), Loudon, page 470, line 10 from bottom.

Didiscus azureus, or (by Loudon) *Traehymene Cærulea*, Loudon, p. 474, l. 6.

[All the above references, excepting the third, are to the 1st Supplement; the third is to the 2nd Supplement, published last year, or up to December, 1832.]

Lupinus elegans (annual, seeds), and *L. mutabilis*.

Schizanthus pinnatus, *Humilis* (seeds), *Nierembergia Phœnicia* (seeds).

August 28th, 1833.

AMICUS.

* I have tried NOBLE, COLVILLE, LODDIGES, and LEE at Hammersmith, for this plant: but in vain. It is coloured in the Horticultural Transactions, three years ago; but they say they have no plant. LOUDON states it to be coloured in the Botanical Register, No. 1152.

ON BLOOMING NERIUM SPLENDENS.—A few years ago I saw at Ross, in Herefordshire, a very elegant plant, the *Nerium splendens*, in full bloom, and which the owner had raised from a small plant which he kept in his parlour. Having purchased a plant at the Fulham Nursery of the same description, I have had it four or five years, and have not been able to get it to blow. Your instructions will much oblige

THOS. LUFF.

Edington, Berks, Sept. 7th, 1833.

P.S. I keep it during the winter in my parlour, and the backs of the leaves are sometimes covered with white spots.

ON THE TULIP AND HYACINTH.—I have been a subscriber to the *Floricul-tural Cabinet* since its first appearance, and have derived both instruction and amusement from it. The readiness with which you receive all questions sent by those desirous of information upon the management of a flower garden, induces me to ask you if the common border Tulip may be suffered to remain in the ground during the winter, uninjured by frost or rain? My garden has three very long flower-borders, in which I have above 1300 Tulips, all of the most common ~~un~~-named kinds. They are scarcely worth the trouble or expense of taking up, drying, and replanting at the proper season; and I should be glad to avoid it if possible. I observe, in an article on the culture of the Hyacinth, by SNOWDROP, in your last Number, that he considers that the bulbs of that flower should *not* be removed oftener than once in four years. Would the same treatment apply to the border Tulip? Perhaps SNOWDROP will reply to this Query.

S. A. H.

July 8th, 1833.

ON CULTIVATING GERMAN AND CHINA ASTERS.—Will any of your floral correspondents favour me with information as to the best mode of cultivating the German and China Aster; together with a description of the several varieties, and what constitutes their different merits as show flowers.

Sept. 9th, 1833.

TIRO FLORILEGES.

GLADIOLUS CARDINALIS.—I shall be obliged to you, or any of your correspondents, to inform me, what is the best method of treatment to pursue with that beautiful flowering bulbous plant, *Gladiolus cardinalis*, so as to have it bloom vigorously.

J. W.

Has the mixture of a portion of manganese, or the oxide of manganese, with the earth in which the roots of flowers are implanted, the property of inducing brighter colours in the petals of flowers? If the application have this desirable effect, will you, or one of your correspondents, be pleased to state what proportion of the mineral should be used, and how, and at what time?

ASTER.

ANSWERS.

REMARKS ON THE STATEMENTS OF "AN OLD F. H. S."—The Committee of the Metropolitan Society, alluded to by a writer under the signature "An Old F. H. S." page 166, beg to state, that so far from the Society having "always held its meetings at some tavern in Gray's Inn lane, Cornhill, or Billingsgate," as asserted by the anonymous writer, the Society has never once met at one of those places, nor at any tavern near them; the only two tavern meetings in London being their shows at the Crown and Anchor Tavern, Strand, and twelve out of the fourteen business meetings they have had having been held at private houses, not near one of those places.—The Committee's determination to keep out improper characters, which seems to lay them open to the malevolent but impotent slanders of the rejected class, will continue unshaken; and Mr. HARRISON would not have been troubled even with the present notice, but that persons in the country might have otherwise been deceived.

Crown and Anchor Tavern, Strand, Sept. 11th, 1833,

[We most gladly insert the above, to correct so gross a misstatement as that sent us, and inserted at page 166. We should be truly sorry for any thing to be inserted in our Magazine that would in the least degree be an undeserved reflection upon any Society, particularly one whose object is to promote the interests of Gardening, and one so respectably supported as the Metropolitan Society appears to be.—CONDUCTOR.]

ANSWER TO "A CONSTANT READER," PAGE 163.—The shoots of *Azalea indica*, when removed to the greenhouse, are from three to six inches long, and some considerably longer; but as the flowers are produced on the end of the annual shoots, it is immaterial how long they are, providing the plants are large enough.—I find the Ghent *Azaleas* to grow best in heath mould, with a small portion of tree leaf soil and sandy loam, planted either with the other hardy kinds or in a bed by themselves. In forming the bed, care should be taken to have it on a dry bottom, as I find they will not do in a bed that holds too much wet about their roots in winter, when in their dormant state; but in summer they will require a plentiful supply of water, more particularly when in flower, if the weather proves dry. Shoots growing from the stocks I remove as they appear.

JOHN MENZIES.

Hope House, Halifax, Sept. 11th, 1833.

ANSWER RESPECTING THE CULTIVATION OF THE *TIGRIDIA PAVONIA*.—I beg to state that I have cultivated these beautiful and showy flowers for several seasons with uniform success by the following means:—I take up the roots in October, and tie them in bunches of six or seven together. I then hang them in a dry room free from frost, till March, when I select the largest roots, and put them in 48 or 32 pots, in a rich compost, four or five in each pot. I stand the pots in a slight hot-bed or a graperly that is forcing, till the plants are four or five inches high, when they are removed into a greenhouse or cold frame to harden. About the end of May, I turn them out into a bed of rich soil in an open situation, and I have never failed in obtaining a good bloom.

EDWARD EDWARDS.

Staines, Sept. 5th, 1833.

REMARKS.

ON IRIS'S OBSERVATIONS, PAGE 166.—The mean and contemptible observations of IRIS, page 166 of the *Floricultural Cabinet*, and the "abundant supply of unnecessary acid matter" which they contain, proves in itself the necessity of better prepared, and certainly less exciting, compositions; the more particularly so, as it is presented as a sample calculated to produce well-grown literary plants.

The eminent endowments, both natural and acquired, of this wonderful luminary, may very probably render it unnecessary for me to inform him that I am one of those who "are in general more conversant with the spade than the pen." I do not, therefore, feel ashamed to confess that my obtuse understanding leaves me somewhat at a loss to comprehend the following quotation, which I beg leave to make from his admirable paragraph:—"If gardeners were literary men, which without disparagement it must be confessed in general they are not, I should raise my voice against SNOWDROP's proposal of applying the pruning-knife."

To an illiterate gardener this indeed appears strange logic, but to literary men it will of course be quite intelligible, and "they ought to be thankful to him for the suggestion"; and being now under his sole protection, they may write as much nonsense as they please. Should SNOWDROP, or any one else, attempt "to lop off the straggling shoots of their literary plants," even if "it would save a deal of rigmarole,"—this *worthy* would immediately raise his voice against so unreasonable a proposal; and why? Why!—They are literary men, to be sure—a very satisfactory reason.

The rude, arrogant, and uncharitable spirit in which the paragraph in question has been written, reflects but little credit on its author. It is a fact sufficiently notorious, and I state it without fear of contradiction, that gardeners have never yet been very guilty of intruding any communications on the public, much less *useless* ones; and therefore so unqualified a reprimand is, to say the least of it, uncalled for.

R. MARNOCK.

Bretton Hall, Sept. 14th, 1833.

ON INNOVATOR'S ARTICLE ON THE PINK.—I observe an article on the Pink, by INNOVATOR, inserted at page 146 of the Magazine. Having carefully read the paper, I cannot help stating my surprise at its contents, and am led to conclude that his statements are only the result of theory, and not of practice.

In the paper I sent you on the Pink, and which is given in page 101, are the detailed results of *my practice*—a method which has never failed to answer my utmost expectations; and I am fully persuaded, that if INNOVATOR saw the success I uniformly have under it, he would be so far satisfied, as to advise me never to alter the mode adopted, and witness my statements justified by practical results. I am also glad to be able to refer to many persons who have pursued the same method, and are equally satisfied with myself. I should like INNOVATOR to condescend to try my plan, before he says anything further about it.

I beg to thank INNOVATOR for his good intentions and advice to me; but, with all due deference to him, I hesitate not to say, that if I adopted his plan, the result would be labour lost. The oil-cake would be much better given to the cows—the cinders to the road—the lime to the masons—and the earth and dung to some far more suitable purpose, in the kitchen garden. If INNOVATOR writes for novelty alone, I hope you will prevent the appearance of similar nonsensical remarks to those inserted in page 146, which appear to be the result of his (stated) fifteen years' practice. INNOVATOR there states, that he grows Pink flowers each one foot in circumference! Astonishing!! If INNOVATOR will send me a few specimens, of the size named, I shall be highly obliged; and it will then remove the incredulity of which I at present am the subject; and I shall be most ready to apologise for making the following daring assertion, as that with which I close this article:—*I affirm that INNOVATOR cannot grow a Pink blossom ONE FOOT in circumference.*

Pitsmoor, Sept. 20th, 1833.

JOHN REVELL.

METROPOLITAN SOCIETY.—Having by accident met with a Number of your *Floricultural Cabinet* a few weeks since, I was so much pleased with it, that I ordered the whole from the beginning, and venture to express a hope that you will not relax in your exertions to make it as extensively useful on all subjects connected with Floriculture, as its past pages promise it shall be.

In your September Number, I observe a letter from AN OLD F. H. S., who has gratuitously undertaken to malign a Society about whose movements he evidently knows but little, for the reason probably that he has been black-balled on his application for admission, and is now rather sore about it. "The galled jade will wince." This may also furnish a reason for his attack on the "pretended literateur," whose name he finds enrolled with his own on the books of the "Horticultural Society." My object at present is, not to defend individual character,—for the party alluded to is, I have no doubt, fully competent to the task of defending himself,—but only to set this OLD F. H. S. right as to the Metropolitan Society. He says, "Its meetings have been always hitherto held in some tavern either in Gray's Inn lane, Cornhill, or Billingsgate." Now I beg to inform him that its meetings *never* have been held in either the one place or the other; that its members, if not as numerous, are equally respectable as the one to which he says he belongs; and that its object has been hitherto, and I trust always will be, to prevent such men from becoming "Associates," as endeavour to convert an opportunity for venting their spleen against an individual into a vehicle for abusing a whole Society. "With what measure ye mete it shall be measured to you again," is a wholesome piece of advice he would do well to remember.

Not being able to judge, as you have not published it, whether the prospectus sent you by your correspondent CRITO is the first announcement of the Society or its regular prospectus, I beg to enclose you one of the latter, and hope with him, that its transactions are not only "destined to form an interesting and important feature in the pages of the *Florist's Magazine*," but to give a tone to Floriculture generally throughout the kingdom, which the establishment of similar Societies has accomplished in every other science. I need hardly draw your attention to the distinguished patronage which this Society already enjoys in the first year of its existence; it will be sufficient to state, that the two shows which have taken place this season in London (at the *Crown and Anchor Tavern, Strand*.) were visited by several hundreds of the nobility and gentry on each occasion, and that the collections of flowers were unrivalled. Looking, therefore, at the circumstances attendant on its

formation, and the hold it has already obtained in public estimation, we are fully justified in anticipating that its operations will become extensively useful in promoting the science of Floriculture, and that it is now, like the *Floricultural Cabinet*, only "Hercules in the cradle."—I send you also the names of the successful competitors at the last show, with the list of prizes then awarded.

WILLIAM MAY, Honorary Secretary

To the Metropolitan Society of Florists and Amateurs.

Islington, London, Sept. 6th, 1833.

[We thank Mr. May for the account of the show; it is inserted with others in our Supplementary Number. We shall be obliged by any others Mr. May may favour us with.—CONDUCTOR.]

REPLY RELATIVE TO THE "SPRINGFIELD RIVAL" DAHLIA.—I beg to hand you the following facts for insertion in the *Floricultural Cabinet*:—

The "Springfield Rival" Dahlia was raised at Tooting (and not near Bromley, in Kent), in the gardens, and by the gardener, of Mr. PERKINS, of that place.

I never, first or last, offered to buy that Dahlia alone; my offer was for any five I pleased to select.

I was never, first or last, informed that I was too late, or that any flower was sold; on the contrary, I was told I should have an answer in a few days.

I never returned in a few days with Mr. HORWOOD, of Twickenham. I never saw the man, the garden, or the flower, but once.

I never heard, first or last, the name of Mr. INWOOD mentioned as the purchaser of any flower; and when I sent days afterwards for an answer, the only satisfaction I had was, that the grower had not made up his mind yet.

It is not for me to impute to Mr. Hogg any particular motive, for to him I am a stranger; but it is evident that he has been deceived by some person, whose object is about as creditable as his information is true.

GEORGE GLENNY.

N.B. See Mr. Hogg's remarks, page 189.

THE VOICELESS PREACHER.

It is summer, and I have seen my garden-loving friend—have heard his glowing praises of the spot consecrated to Flora. I have visited it, and am impelled to speak of all that is sweet, and gay, and beautiful—of all that is delicate and magnificent in the world of flowers.

When singing the "Winter Garden" I was fain to give the reins to my imagination,—indeed, to spur the lazy and almost torpid faculty; but ah! how different is it now! for while I inhale an atmosphere of balmy odours, listen to the voice of aerial songsters, and behold the splendid carpet spread by nature's God, I am obliged to hold with rigid grasp the rein on Fancy, lest she should conduct me beyond the bounds of reason.

The first little garden monitor which speaks to the ear of piety and of feeling, is the unobtrusive crocus. It is the youngest born of winter, and may be considered as a link which connects that season to the spring, and which, having by the potent aid of sunshine and of shower, secured the newly-caught season, retires unrepiningly with its ungracious parent. Such is the conduct of the unostentatious, who having served the purposes of usefulness for which they left the shade, return to it cheerfully as did the Roman Cincinnatus to his plough, after subduing the enemies of his country.

We are not left to mourn long the sudden exit of our early little visitors, as their places are more than filled by guests who, from having basked in the gentle smiles of a moderate sunshine, are emboldened to erect their heads, and to assume all the gay, yet unexpensive colours of the rainbow. Such is the daffodil, the hyacinth, the tulip, &c. &c. The brief sojourn of these brilliant belles is lamented by the florist, whilst the moralist endeavours to draw a lesson from it:

"Returning seasons still new flowers bring,
But faded beauty has no second spring."

But religion and morality say that intellectual beauty, the result of high mental culture, is perennial—that it survives all seasons and their changes. If then, my fair reader, your mirror tells you a plain but wholesome truth, endeavour not to disguise that truth, nor mourn that its tendency is humbling;

but remember that you have that within which must exist for ever, and which may exist in unfading beauty.

Whilst making these few reflections, lo! the flowers have drooped; the too ardent sun has looked even the bold and flaunting tulip out of countenance; and turning from its prostrate honors to find a more agreeable resting place for the eye, it is caught and fixed by the miniature charms of the lily of the valley. With that flower I have associations the most tender and affecting. I knew a young and beautiful female, on whom consumption had fixed its unrelaxing grasp, and who, even when pressing her last pillow, evinced her admiration of the beautiful works of nature. I saw her a little before her death; she held in her hand a little bunch of the lily of the valley, and the tenacity with which she pressed this faint emblem of life seemed to indicate that she would fain have lingered here a little longer, had it been the will of Him in whom however she trusted with child-like confidence. The lily-looking hand was found to retain the little flower even after life had fled:

"Bring flowers for the grave of the early dead."

Why are we attracted to yon bed of lowly green? In vain the eye scans its surface: not one blossom repays its scrutiny.

"The violet is modesty, for it conceals itself,"

—But it creates around and above it an atmosphere so pure, so salubrious, that we are instinctively drawn into its vicinity. Such too is the effect of humble excellence, for neither the obscurity of birth or of fortune can hide from those who appreciated virtue, the diffusive influence of active benevolence.

The queen of flowers comes in all its beauty, fragrance, and variety, bestowing on the season of its triumph a charm of which no language can give an adequate idea. In every direction to which we turn, we are welcomed by an immense host of smiling rosy faces, that are waiting to be noticed and admired, yet

"The rose in modesty, though it reveals itself,
For it a blush betrays."

We may compare to it the moral courage of him who dares, if duty calls, to present himself to the public eye, while at the same time his native diffidence betrays itself in the deep crimson of his brow.

The rose is a discreet visitor; it rushes not suddenly into our presence; its approach is so gradual, its stay so agreeably protracted, and its adieu so cordial, that we are scarcely aware of the thousand annual guests who are waiting admission, and who succeed each other so rapidly as to leave but little time for admiration, and none for regret. We are disposed to pass them over with as little thought or comment as we bestow on the artless calls of the ephemeral world of fashion.

How is the gardener employing himself in yonder border of pinks? Oh, man, man! in what have those poor unfortunates offended, that you tear them thus unrelentingly from their parent earth, and condemn them to exile or to death? Alas! their only offence is a too great simplicity. In the gardener's eye singleness is criminal. Forgive, forgive, consistency; if I approve in practice what I condemn in principle, and if, whilst I execrate the cruelty and injustice of the decision, I admire the taste which dictated it.

The king of flowers approaches, for as the rose possesses all the distinctive traits of royalty, the majesty of beauty, of modesty, and of sweetness, the dahlia is no less distinguished by the more masculine characteristics of magnificence, munificence, lofty grandeur and supremacy.

But who are those rustic strangers that appear so evidently from home in the royal presence? Are they intruders, or have they been brought hither to gratify imperial curiosity? Shriuk not, forest, meadow, and hedge-born flowers! Yon *Lobelia cardinalis*, *Asclepius*, *Orchis*, and *Eupatorium*, possess more value in the eye of science than all those monsters which have fattened on the gardener's store of luxuries. And you, humble being, who have been thrown by accident, or drawn by compulsion, into the presence of him who calls himself your superior, blench not, but look boldly, yet unpresumptuously, in the face of man, your fellow; and if frowned upon, support yourself with the idea that you are of more esteem in the eye of Him who "judgeth not as man judgeth," than the proudest monarch who ever wielded an unjust sceptre.

FLORA VERNAL.

REFERENCES TO PLATE.

Pansies.—We are indebted to Mr. Hogo, of Paddington, for the three varieties of Pansies given in our plate this month; the drawings were taken from plants growing in his garden. This beautiful tribe of flowers has of late become very attractive, and, as a natural consequence, great improvements made by attention to their culture. From seeds procured from the best kinds, an infinite variety of flowers may be produced.

Fuchsia elegans.—This distinct and handsome addition to this very much esteemed genus of plants, we received from Messrs. FISHER, HOLMES, & Co., nurserymen, Handsworth, near Sheffield. The variety was received from Port Antonia in the year 1831; it was turned out in the open border early in 1832, and is now a very large plant, and had it not been headed down, it would have been five or six feet high; it forms a most beautiful bush, and is at least nine feet in circumference—flowers abundantly when once established. Messrs. Fisher, Holmes, and Co. have plants now ready for sale, and can furnish 200; they have not the slightest doubt of the plant being perfectly hardy.

Cartwright's Prince of Orange Polyanthus.—A drawing of this neat and handsome Polyanthus was sent us by our friend Mr. WIGG, of Leicester. That gentleman states that it had been raised by Mr. CARTWRIGHT, florist, Oadby, near Leicester, who has a stock of the plants on sale. The flower appears to possess properties which are a near approach to perfection. The flower is smaller than some other kinds, but in other respects appears to be a superior kind.

MONTHLY FLORICULTURAL CALENDAR FOR NOVEMBER.

CACTUSES.—Plants that have been kept in the open air during summer, may be brought to bloom successively, by taking such as are desired to bloom immediately into the heat of a forcing pine-house. Other plants, to bloom afterwards, should be kept in a greenhouse, protected from frost.

CALCEOLARIAS.—Plants that have been grown in the open borders during summer, should be taken up and potted, afterwards kept in a cool frame, or a cool part of a greenhouse, being careful not to give much water; just sufficient to keep the soil moist will only be necessary.

CHINESE PRIMROSES (*Primula prænitans*), that have been grown in open borders, will require to be taken up.

CHRYSANTHEMUMS.—Some plants that are grown in pots, and taken into the greenhouse, will be found to have pushed a number of suckers. If the offsets are wanted for increase of the kind, it is advisable to pinch off the tops, so as to prevent their exhausting the plant to the weakening of the flowers. If the offsets are not wanted, it is best to pull up the suckers entire. Attention will be required to watering, as the roots absorb much if given. If the plant is allowed to wither, it checks the flowers, whether in bud or expanded. And so much do we admire this handsome genus of flowers, that we are fully persuaded their beautiful blossoms, exhibited in form and colour, will most amply repay for any labour bestowed on the plants.—(See the excellent article on Chrysanthemums, by IRIS, page 121.)

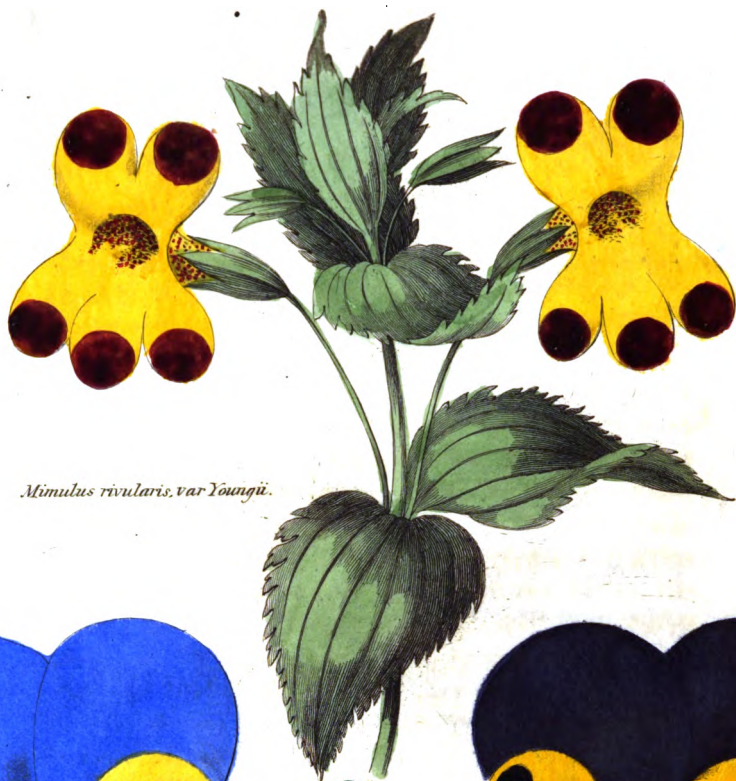
DAHLIAS, seeds of (if not cut off by frost), will now be perfected. They are best retained in the heads as grown, spread singly where they will not be liable to mould, and kept in a dry (not hot) situation; being thus kept in the chaff, the small seeds will not shrivel, but be kept plump. The roots will now require taking up, if not done last month.—(For the directions for taking up, &c., see pages 5 and 33.)

DUTCH ROOTS may most successfully be planted this month (see page 192).

FUCHSIAS, and **GREENHOUSE PLANTS** intended to inure to the open air, will require to have protection at the roots, &c. (see pages 8 and 29.)

HERBACEOUS BORDER PLANTS may still be divided and replanted, (see page 192.)

RIDGE, PRINTER, SHEFFIELD.



Mimulus rivularis, var. Youngii.



Sky Blue & Yellow.



*Allen's
Queen Adelaide.*



Appleby's William the Fourth.

C.M.H. Delin.

J & J. Parkin Sculp.

THE
FLORICULTURAL CABINET,
DECEMBER 1st, 1833.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Cultivation of Cypripediums.* By
Mr. EDWARD LEES, Longford Bridge, Stretford,
near Manchester.

In compliance with your request of information how I cultivate the various species of Cypripediums I possess, I transmit you the following particulars of my mode of treatment, &c.

Cypripedium is from *Kypris*, Venus, and *podion*, a slipper, or lady's slipper, in allusion to the form of the flower, which is shaped like a shoe. The flower is not only singular in appearance, but some of them are very handsome. One of the species is a native of this country, and several others have been introduced from foreign climes.

All the species I possess I cultivate as follows:—I plant them in large pans, sixteen to eighteen inches across, and eight inches deep. These pans are filled one-third of their depth with drainage. For Cypripedium Calceolus, which is a native of Britain, I use pieces of old mortar, lime rubbish, &c., and for the other species broken potsherds.

The compost in which I grow Cypripedium Calceolus consists of the following materials:—One barrowful of decayed straw thatch or leaf mould, but thatch is preferable; one-fourth of sandy red loam, one-fourth of pulverised lime rubbish, and one-fourth of clean sharp grey sand.

The roots are planted very near the surface, and a handful of clean sand placed over the buds or crowns. On the surface of the pans I plant live growing moss, and grass round the edge. The plants have the pots top-dressed once a-year, performing it as soon as they have flowered, in doing which the grass is pulled out, and small roots of it are again planted. If I wish to divide my plants (which should very seldom be done), I do it at this season of the year, whilst they are in a growing state, keeping them covered with glass for a week or two, and well watered, if the weather is warm and dry; they scarcely feel the removal.

During summer the pans are kept plunged in a situation where they have the morning sun to shine upon them till ten o'clock.

The same kind of preparation, and treatment in other respects, I have practised with the American yellow-flowered species, viz. *Cypripedium pubescens*, and *C. parviflorum*, with the exception of the lime rubbish; I have no doubt, however, it would also suit these species, but have not tried it.

C. spectabile, also a native of North America, requires a different soil, viz. :—a barrowful of sandy peat earth; half a barrowful of soft peat soil, with *Sphagnum* growing amongst it; the same quantity of old straw thatch or leaf mould, and a similar proportion of sharp grey sand. The roots are planted as described above.

When my plants are in a growing state, I give all the species abundance of water. *C. spectabile* particularly requires it. This latter will not bear removal whilst in a growing state, as the yellow-flowered species do, viz. *C. pubescens*, *C. parviflorum*, *C. humile*. *C. arietinum* should be grown in leaf mould and sand, as light as possible, and be treated in other respects as the before-named kinds.

My reason for planting grass round the edges of the pans is, because I find the roots of *Cypripediums* delight in running amongst the roots of grass. This is very observable on examination, in the summer season, when I have uniformly found vigorous white roots round the inside of the pans, which is a certain sign of health, the best proof whereof is evinced in the vigour of the plants.

I never protect my *Cypripediums* from autumnal rains, as is the practice of many cultivators of this tribe of plants. I find that they do not in the slightest degree suffer from moisture, pro-

vided the pans are properly drained, so that the water can pass quickly away.

During severe frost, I cover the pans with sheaves of clean dry straw, but I allow the plants to have all the moisture of the winter season, when the weather is mild.

By pursuing the treatment as above described for a number of years, this class of plants will be kept in health and vigour, and will annually increase in size. I had this season one root of *C. pubescens*, which produced fifteen flowering stems, and another root of *C. Calceolus*, with thirteen blossoms,—both of which have been grown from very small plants. I have also been most successful with *C. spectabile*.

For a very suitable mode of treatment with the tender species of *Cypripediums*, I refer you to your justly esteemed and respectable correspondent, Mr. MENZIES, who is much more conversant with their treatment than I am.

October 17th, 1833.

EDWARD LEEDS.

[NOTE.—The cultivation of this singularly handsome genus of plants, in the very successful manner which attends the practice of the above gentleman, is to us a matter of much interest and value, and we hope it will be no less so to many of our readers. We feel highly obliged by Mr. LEEDS's attention to our request, and thus enabling us to give in our Magazine the detailed practice of growing the plants with certainty and such signal success, from year to year. We now appeal to the generous reference which Mr. LEEDS has directed us to, and we hope Mr. MENZIES will again oblige us.—CONDUCTOR.]

ARTICLE II.—*On the Treatment of Greenhouse Plants in Rooms.* By Mr. JOHN PLANT, Gardener to T. ANDREWS Esq., Harpurhey, near Manchester.

Being an admirer of the prevailing practice of cultivating Greenhouse plants in rooms, and having had numerous solicitations for advice as to their management, I am induced to draw up the accompanying remarks, judging that they may be in some degree useful, to a portion at least, of the readers of the *Floricultural Cabinet*. If the hints are thought deserving a place therein, they are at your service. I do not wish it to be understood that I think plants can be grown as vigorous, or blossom as freely in rooms, as those cultivated in well-constructed greenhouses, but I do not

hesitate to assert, that those persons who may think proper to adopt the rules hereafter laid down, will find the result to answer every expectation.

Pots.—The necessity of having pots of various sizes is very obvious, the shape however should be uniform, in proportion as follows: viz, five inches deep, (inside measure,) five inches diameter at the top, and three and a half inches diameter at the bottom. Pans should be provided to correspond.

Draining.—Good draining is essentially requisite. Each pot, according to their different sizes should have from two to four inches deep of coal cinders, broken to the size of a child's common play marble laid at the bottom, first placing a piece of pot over the hole at the bottom, taking care the piece is not flat, but of that form that it will freely allow superabundant water to pass off.

Soil.—Take the top spit with the turf upon it from a common or old pasture field, not digging deeper than six inches, the soil should be entirely free from clay, and if the loam be sandy, it is preferable. To this soil add one fourth of rotten horse dung. The longer this compost is laid together, the better. Before using it for planting in, it must be well chopped and broken, but not sifted at all through a riddle, as plants flourish far more freely in the soil when left open, there being a freer passage for water, heat, air, &c. to the roots. There are but five families of greenhouse plants that refuse to flourish in such a compost as the above. I do not include Camellias and Ericas (Heaths), though I have no doubt but they may be cultivated in rooms with success; the latter tribe will be found the most tenacious of injury in such an habitation.

Potting.—I consider it but superfluous saying any thing about propagating plants, when the cost of a small plant is so trifling, and may be obtained at most nurseries.

To begin with a plant procured from the nursery. In the first place, examine if the roots are coming through the hole at the bottom of the pot; if so, this points out the necessity of repotting, which must be repeated until the plant has attained the size required for blooming. The size of the pot for repotting in should be about two inches more in diameter than the one the plant is taken out of.

Watering.—River or rain water is the best, and should always be of the same temperature as the room in which the plant is

placed. The pot should always stand in a pan or feeder, but water should not be allowed to stand in it, excepting when a plant is pushing forth flower-shoots or stems, at which period many plants, particularly strong growing kinds, are much assisted by having a constant supply of it, not to glut them, but to allow that given to be dried up before a fresh quantity is given. Particular attention should always be paid that no plant be allowed to flag its leaves. In some stages of growth and situation, there will be found plants that will require water to be given them twice in one day, and at other times not oftener than once a week. The best criterion to know when a plant requires water to be given, is when the soil on the top of the pot appears dry; then a flooding over is sufficient.

Filth.—With some kinds of plants the green fly is often found very troublesome. Sprinkle them over with diluted tobacco-water, or the plants infested may be put into a packing-case, and fumigated with tobacco-paper; by either application the insects will be effectually destroyed. The tobacco-water, or tobacco-paper, may be procured of the tobacconists at a very trifling cost; one shilling expended in either would serve for twelve months, with a number of plants. It is necessary to keep the plants free from dust, and to pick off decayed leaves; also frequently stirring the mould on the surface with a blunted stick. They will require washing over their tops once a week, either by means of a syringe or watering-pot. In frosty weather, watering over their tops should be performed in-doors.

Air and Light.—When the air is not frosty, a free circulation is at all times beneficial. In order to have healthful-looking plants, the branches should not be allowed to touch each other, and should always be kept as near the light as possible, frequently turning the plants, to prevent the heads being deformed, as the natural inclination is to lean towards the light.

Pruning.—Taking off the point of the main shoot of a woody plant when young, causes it to grow bushy, and be formed of a handsome shape. Also, when a plant is making shoots for flowering, taking off the points of the most luxuriant shoots, tends to increase the quantity and size of the blossoms.

Ripening the Buds.—The singularly formed foliage, or shape of some plants, may obtain for them a place in collections, but in general most plants are admired for their blossoms. In order to have them in perfection as well as profusion, it is highly essential

that the embryo, or bud, be in a mature state. Bulbous plants, as Amaryllises, Hyacinths, &c., when the flower is decayed, the foliage must be encouraged for a few weeks; after which, it may be allowed to die away and remain at rest. The pots retaining the bulbs may be placed on a shelf, where they will be dry, until the time of repotting, which in general will be in October. Those plants which produce their blossoms upon the wood of the same season, as Pelargoniums (Geraniums), Salvias, Roses, Chrysanthemums, &c., after flowering, require their shoots to be cut back to three or four buds, taking care to preserve the form of the plant, and giving but little water during the state of rest. When the plant begins to grow in the spring, having a larger pot given, and a regular supply of water afforded, and kept in moderate warmth, the blossoms will be produced. Herbaceous plants, as most species and varieties of Calceolarias, &c., after flowering, require their tops cutting off, and but little water during their rest; a large pot is given when the plants begin to grow. Deciduous plants, as Fuchsias, Hydrangeas, &c., when the leaves begin to fall, will require but little water, and rest until spring, when a larger pot will be necessary, and the shoots to be pruned back a little. Evergreens, as Azaleas, Myrtles, &c., when done flowering, require a larger pot, and their wood encouraging until it becomes ripe. Here I include the Cactus tribe, &c. At this potting some of the species will require their old wood thinning out.

Choice of Plants.—The taste of persons being so dissimilar, no list of plants I could furnish would be able to give entire satisfaction; I therefore think it unnecessary to attempt it here, and must leave the amateur to suit himself, his experience and fancy being likely to afford the best directions on the choice of plants suitable for him to cultivate.

October 19th, 1833.

JOHN PLANT.

ARTICLE III.—*On the Treatment of Eranthemum elegans, or Justitia elegans.* By Mr. JOHN PLANT, Gardener to THOMAS ANDREWS, Esq. Harpurhey, near Manchester.

This plant produces its blossoms during October, and thus blooming at a period of the year when flowering plants are very

acceptable for the hothouse or conservatory ; such being the fact, and judging no plant compensates more for the attention given it than the one in question, induces me to forward you my mode of treatment with it, hoping the remarks will prove of use to some of the very numerous readers of the *Floricultural Cabinet*.

The *Eranthemum elegans* is termed a shrub or tree. It is a native of the Phillippine Islands, and is very readily propagated by cuttings, taken off at the second or third joint, during any of the spring months, inserting them singly into 48-sized pots, placing them in a hot-bed frame whose heat is from 70 to 80 degrees ; the cuttings soon strike root, and may then be taken into the hothouse, and by giving them larger pots as they require (which will be frequent), will make good plants by the time of blooming. I grow them in a rich loamy soil.

I take off the ends of the principal shoots until they have attained the height of a foot or eighteen inches, in order to cause the plants to become bushy, and to increase the quantity of blossoms. I then place under each plant a feeder or pan, and keep them regularly supplied with water until they have done flowering, when the quantity is gradually reduced. The plants are then cut down to three or four joints, and but little water given until the young shoots begin to push in the spring, at which time a larger pot is given.

Under the above method of treatment I have had plants, in 12-sized pots, three and four feet high, literally covered with blossoms.

The soil I use is composed of one half rich sandy loam, to one half of peat earth ; the pots are well drained by using cinders.

Sept. 8th, 1833.

JOHN PLANT.

ARTICLE IV.—*On the Treatment of Triverania coccinea.* By FLORALEGUS.

The *Triverania coccinea* is a very handsome herbaceous stove plant, and merits a place in every collection. It is a native of the Island of Jamaica, West Indies. I have admired the plant much, and cultivated it extensively, during the last ten years, and

I am presumptuous enough to conclude, that I can bloom it in such a state of perfection as cannot be excelled. The following particulars include my mode of treatment.

After the plants have ceased blooming, watering of them is gradually lessened until the tops die down; the roots are then preserved in the same pots the plants have been grown in, in a state of rest, until the beginning of February, at which time the pots are earthed over with some fine-sifted soil, then watered freely with the rose, and afterwards placed in a hot-bed frame kept at from 70 to 80 degrees of heat. When the shoots are two inches high, they are carefully raised up, and cut off within the surface of the soil, and planted singly out into 60-sized pots. Afterwards the plants will require repotting, which I always do when I perceive the pots in which they are growing is full of roots. The last sized pots I use is twenty-fours, and when the plants are established in these, they are removed to the conservatory to flower; and during the months of September and October, they make a most splendid and imposing appearance. The soil I use is a light rich loam, with one fourth part of peat earth well mixed with it. The plants will require a free supply of water occasionally. I give manure water, which invigorates the plants, and the blossoms are increased both in size and number.

Sept. 23rd, 1833.

FLORALEGUS.

N.B. I had drawn up the above remarks before I received the October Number of the *Cabinet*, in which Number I find the very excellent article on the *Triverania coccinea*, by Mr. APPLEBY. My method, however, being different in some respects from his, and in its practical results afforded me the highest satisfaction, as well as other persons who have tried my mode of management, I could not withhold transmitting it for insertion in the *Cabinet*, hoping to contribute a little to the gratification of the cultivators of flowering plants.

Oct. 15th, 1833.

F.

ARTICLE V.—*On the Culture of the Genus Lobelia.*
By AN ARDENT AMATEUR.

The genus *Lobelia* comprises plants of much interest to an admirer of flowers: some of them exhibiting blossoms strikingly elegant, brilliant, and beautiful, and of a commanding figure in stature; whilst others, more humble in growth, are equally pretty and pleasing. In the former class, the plant rears up its splendid spike of the richest possible hue; the other, in prostrate beauty, displays a carpet of simple, yet engaging elegance.

Thinking a few hints on the culture of a number of the *Lobelias* would be acceptable to the readers of the *Cabinet*, induced me to draw up the remarks here transmitted for insertion therein.

The *Lobelia* was so named by that eminent French botanist, Father PLUMIER, (who discovered the first species of it, in America,) in honour of Dr. LOBEL, a learned botanist, who published the figures of a great number of plants at Antwerp in 1681, and two or three other gardening books before that time. The genus is now ranked in the class Pentandria, and order Monogynia, although formerly classed in Syngenesia. The natural order is Lobeliaceæ, very closely allied to Campanulaceæ, from which their colour alone distinguishes them.

Lobelia cardinalis and *siphilitica* are natives of Virginia; *fulgens* and *splendens*, natives of Mexico, are the principal half-hardy species (for none of them are entirely so, except *urens* and *Dortmanina*, or *Water Gladiole*, natives of this country); these are the most frequently cultivated. *Lobelia salicifolia*, *speciosa*, and *Tupa*, are handsome, but require the protection of a greenhouse. All the principal varieties can be obtained at MILLER's garden, near Bristol, where they flower well; the average cost is about 2s. 6d. to 3s. 6d. each. Having seen many gardens and nurseries, I cannot forbear naming that MILLER's is the neatest and best arranged that has ever come under my notice.

All *Lobelias* are poisonous, though some have been used medicinally, as *Lobelia siphilitica*; hence its name. *L. cardinalis* is used as an Anthelmintic, or destroyer of worms. *L. inflatus*, a very active emetic—I believe the most active known. *L. Tupa* yields a dangerous poison; the smell frequently causes head-aches. *L. longiflora* is a most venomous plant; when taken inwardly

nothing can stay its effects, and death is the sure consequence. I have inserted these remarks, more closely allied to Botany than other parts of gardening, as a warning to any inexperienced persons, (whom the splendid colour of the flower might deceive,) considering that the names of all, and more especially such dangerous plants, cannot be too fully pressed upon every one's memory.

L. cardinalis and *siphilitica* can be propagated in the best manner from seeds, which ripen well in this country. All the other sorts I have named above, can be propagated from seeds, offsets, and cuttings. I take off the suckers in October, and put one in a pot, protecting them in a frame during the winter, forcing them gently on a dung hotbed; shifting the plants into larger sized pots at various times as they require it. The compost I use, is made up of yellow loam and a small quantity of leaf mould and sand mixed with it. The period when they require this repotting is from February to May. At the commencement of the latter month I remove them into a greenhouse, and harden them gradually to bear the full exposure of the open air. By this time they will have just begun to push forth flower stalks; the plants must then be placed in water—if there is the convenience of an Aquarium, so much the better—if not, a saucer filled with water is a very good substitute. They will begin to flower in July, and, if shaded, will last a considerable time in bloom. Shading is a general rule for all high coloured flowers, such as *Trevirania coccinea*, *Crassula coccinea*, &c. By placing the *Lobelias* in water, they will not require to be removed under a frame for winter protection, though coming originally from so hot a climate as Mexico.

Propagation, by cuttings, is very frequently adopted. In June, take a young stalk, and divide it into lengths of five or six inches each; plant them under a hand glass, upon a border having an eastern exposure; water occasionally. Cuttings thus put off, strike with remarkable facility, and will be well rooted in a month, when the young plants may be managed as above directed.

As the plants always bloom the first or second year, it is the best plan to raise a good supply from seeds. It should be sown immediately after it is ripe, and be protected under a frame. In the spring the seeds will begin to vegetate and the plants appear;

they should be transplanted into pots, and repotted as they require it during the year. The spring following they should be put into pots sufficiently large to give full scope to their roots, when they will be in flower about July.

The suckers should be taken off every autumn ; for, if this is neglected, the plant will very likely be lost, as the stem will die down and rot ; thereby weakening, if not destroying, the growing plants.

With the little trouble in culture above described, these plants will be one of the greatest ornaments in the flower garden. I have them frequently four feet high.

AN ARDENT AMATEUR.

Stoke, near Bristol, Nov. 1st, 1833.

[NOTE.—The requests of our Correspondent at the close of the article sent, will meet with our attention —CONDUCTOR.]

ARTICLE VI.—*On the Treatment of Nicotiana longiflora, long flowered Tobacco.* By AMICUS FIDO.

In August, 1832, seeds of the *Nicotiana longiflora* were given me by a friend ; they were the produce of the same season. With the seeds, I received a description of the plant and flower. It was described to me as a very handsome flowering plant, meriting a situation in any flower garden. Immediately on getting the seeds, I sowed one half in a pot of light rich finely-sifted soil, just covered the seeds, and placed the pots in a hotbed frame. When the plants were strong enough to transplant, I potted them off into 60-sized pots, using a rich soil ; I then placed them in the greenhouse, and kept them there till spring. The first week in May I turned out six plants into the open border, under a south aspect wall ; the soil of the border is annually enriched during winter or spring with leaf mould and well rotted cow dung. The plants soon took the advantage of the new situation, and by the end of July each was four feet high, and spread proportionably, producing hundreds of pure white blossoms at the same time. They are slightly fragrant ; when the sun is powerful the blossoms close up for almost three hours, about the middle of the day ; but, during the other part, are fully expanded ; and towards evening the plant has a most beautiful appearance.

The remaining part of the seeds, saved from the packet received in August, I sowed the first week in March of the present year. When the plants were strong enough, I transplanted them as I did those of the first sowing, and in May turned them out in the border. The plants grew vigorously, but did not produce more than one half of the flowers that the autumn sown plants did, but produced a great deal more foliage. The cause I am not able to explain, but such was the fact. Early in September I took off a number of lateral shoots, cutting them off close to the mother branch; these I have potted in sandy loam, inserting half a dozen in a pot; I plunged them in a hotbed frame, in which I had had melons. On examination yesterday, I find the cuttings have struck root; these I purpose keeping in the pots, as now struck, until spring, and then pot them off into small pots, and finally turn them into the open border as done by the original plants.

Early in September, I collected some seeds, and sowed the same as last year, and now have some young plants from seeds as well as from cuttings. Which does best next season I hope to communicate to you by the close of the summer.

I have been thus particular, in consequence of the striking difference manifest in the plants as stated, and from the circumstance of the plant well deserving a place in the flower border.

Oct. 23rd, 1833.

AMICUS FIDO.

ARTICLE VII.—*On the Cultivation of Thunbergia alata.* By FLORA.

To those persons who know the *Thunbergia alata*, it is quite unnecessary to offer a word, either in describing the flower, or pointing out its beauties, by those individuals it will not be forgot. However, a remark or two may be of use to those who are not acquainted with the plant.

Thunbergia, is so named in honour of Sir Peter Thunberg, M.D. Professor of Botany in the University of Upsal. It is a native of the East Indies; introduced into this country in 1823. With us it is treated as a stove plant. It is a pretty climbing plant, in flower nearly the whole year. The flower is of a beautiful buff, having a very black centre; the latter colour is the inside of the

tubular part of the flower. The two colours united, make the blossoms very strikingly pretty. The plant is admired by every person seeing it. It certainly deserves cultivating, wherever practicable. I find, that during the summer months, it grows and blossoms freely, either in a greenhouse, warm room, or planted out in the open border ; taking the advantage of a sheltered sunny situation, in such a place it has this summer flowered profusely.

The plant has, by many persons, been found difficult to propagate, as well as to keep, from year to year. I have not found either to be so under the mode of treatment I practice.

Propagation.—I take off the lateral shoots when about four inches long, cutting them off quite close to the stem producing them ; they are then inserted in sand and loamy soil, about equal parts of each ; I plunge them in a hotbed frame, where they strike root in two or three weeks ; I then separate them from the cutting pot, planting them in small pots. It is quite essential to strike them in *moist heat*, for not more than one in ten will strike in a dry atmosphere.

Soil.—I use a rich loamy soil, mixed with a portion of sandy peat and leaf mould.

Culture.—After separation from the cutting pot, and potting them off, I keep them in the frame as long as their height permits, and in some cases I train them to horizontal cords till they are several feet long. The red spider is a most formidable enemy to the plant, but in moist heat the insect is kept off, and the plant will flourish amazingly. As the pot becomes filled with roots, I repot, using one each time about four inches more diameter than the one before grown in it.

When I judge it proper to remove the plants from the hotbed frame, and to place them in the stove, greenhouse, or conservatory, I have slender, green painted, wire frames, about six feet high. They are formed by having four uprights, placed ten inches apart, for large size ; and smaller in proportion, suited to the pots ; round these uprights, wire is spirally coiled round to the top ; the plant is thus trained to the frames, which not only afford a desirable support, but it exhibits the beautiful blossoms entirely to view, forming a most enchanting sight. Some plants I have trained to a frame composed of four uprights made to splay outwards, so that at three feet high, the frame is three feet across ; the uprights

are secured together by cross wires. I have already observed that the red spider is an enemy to the plant; its depredations are easily discovered by the foliage appearing with white spots, and the whole becoming pale. When this is noticed, I syringe the plant with soap-suds, taking care it gets well to the underside of the leaves; by twice applying this wash, the insects will be destroyed, the glutinous matter adhering to the foliage for a few days, the insects are hungered out. When a plant is in health, it is advisable occasionally to syringe with water, or soap-suds, and thus prevent the appearance of the insects.

When I plant in the border, in the open air, I turn out of the pots a strong plant, in a light rich soil. If a small plant be put out, I find its weakness prevents its ever making any show, till the end of September, or even October; at which late period of summer, the colours of the flowers are generally injured. I have turned out several plants during the last two seasons, on the thirteenth of May, which by July have been most splendidly in blossom.

September 27th, 1833.

FLORA.

ARTICLE VIII.—*On flowering Nierembergia phœnicea, (Petunia integrifolia,) Coreopsis tinctoria, (now Calliopsis bicolor,) Salvia cardinalis, Gilia capitata, &c. in a Dwarf manner.* By Mr. WILLIAM HEDGE, Lamport, Cornwall.

All the above plants possess considerable beauty, and are of recent introduction into this country; they certainly merit a place in every flower-garden. The general objection to them is the height to which they grow, when planted in good soil, such as is suited for producing fine blossoms. The plan I have adopted with all the above-named kinds, and others, as Ragwort, Clarkia pulchella, &c., when I wish to have a bed of a sort, is, to lay the branches down. Of the Nierembergia and Salvia, I raise plants from year to year by taking off cuttings in September. In February I pot the cuttings off, and plant them out in the open border about the middle of May. In planting I lay the ball of earth on its side, and thus proceed to cover the bed entire. Of

the other kinds of plants I sow seeds the first week in September, and place them in a hot-bed frame till up. I then transplant the number required into small 60-sized pots. I harden the plants gradually. In spring, about the end of March, I repot into larger pots. By the middle of May, I turn them out into the open borders, placing them on their sides. When the plants are fixed, it is necessary to secure them down by pegs. In a short time, the tops will begin to rise, and in a fortnight they will generally have an erect growth. They will soon form a mass of flowers, with the ends not rising many inches from the ground; and as lateral shoots will continue to grow, a continued and increased profusion of flowers will be the result, the oblique position of the plants tending to cause an increased production of blossoms. When I wish to have the above-named plants to correspond in size with different dwarf kinds, I lay them down accordingly, and peg down at the place I desire the bend to commence. I have adopted the same plan with Dahlias, and they answer admirably. The sorts with which I tried were upright flowering kinds, and not drooping flowers. For beds of a sort, the above kinds, thus treated, make a most pleasing diversity. I have laid blue slates under some of the kinds, and I find it answer a good purpose, the absorbing rays of heat greatly tending to mature the plants, blossoms, &c.

WM. HEDGE.

Sept. 19th, 1833.

PART II.

EXTRACTS.

Plants figured in the following Periodicals for November:—

Curtis's Botanical Magazine, 3s. 6d. coloured, 3s. plain. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow.

1. *Pimelea sylvestris*, wood Pimelea; class, Diandria; order, Monogynia; nat. ord. Thymelææ. A handsome greenhouse shrub, with rather copious, green and rounded branches, quite smooth. Leaves opposite and decussate,

of a glaucous green colour. This pretty species of *Pimelea*, with its large copious heads of delicate rose-coloured flowers, and prominent stamens with orange-coloured anthers, has been raised in the Glasgow Botanic Garden, from seeds sent by the late Mr. FRAZER, and adds another to the species not hitherto, we believe, cultivated in the gardens of Europe. Culture: increased by cuttings struck in sandy loam, or sandy peat, requires an airy part of the greenhouse. Soil, sandy peat. *Pimelea*, see page 60.

2. *Hypericum hyssopifolium*, hyssop-leaved St. John's Wort. Polyadelphia, Polyandria. Hypericinea. Of the extensive genus *Hypericum* (uperikon of Dioscorides) upwards of one hundred and twenty species are enumerated by DE CANDOLLE. Some are employed medicinally, but the greater number recommend themselves by the liveliness and number of their blossoms.

"Hypericum, all bloom, so thick a swarm
Of flowers, like flies, clothing its slender rods,
That scarce a leaf appears."

a quality in which our present bright yellow flowering species is by no means deficient. It is at present but little known in our gardens. It is a native of the South of France, and also of Tauria, from which latter country it has been introduced into the Edinburgh Botanic Garden, through the liberality of Dr. FISCHER. It flowers in the open border in June. Culture: it is increased by parting its roots as well as by seeds.—Soil: sandy peat, or sandy loam.

3. *Syringa Josekæa*, deep flowered German lilac. Diandria, Monogynia. Oleinea. A new species of Lilac, even though less beautiful than the two in common cultivation, yet being equally hardy, cannot fail to be a most acceptable ornament to our gardens and shrubberies. From the Botanische Zeitung for 1831, we learn, that at the meeting of Naturalists in Hamburg, in 1830, on the sitting of the 20th September, Baron JACQUIN exhibited dried specimens of this plant from Siebenburgen, and since its discovery was due to "Frau Baronin von JOSIKA, geborenen Gräfin Czaki," he named it in compliment to that distinguished lady, and gave it a specific character. In another part of the same work we find that not only is the present species a native of Germany but that the common lilac, *S. vulgaris*, which has hitherto been considered almost exclusively of Persian origin, is stated by Dr. HEUFFEL, to adorn with its copious blossoms the inaccessible chalky precipices of the Coerna Valley and Mount Domaglett in Hungary, as well as the whole group of rocks along the Danube. The *S. Josekæa* flowers in the open border in May and June. It was received at the Edinburgh Botanic Garden from Mr. BOOTH, of Hamburg, in 1833. Flowers, panicle terminal, corolla, half an inch long, deep lilac. Leaves shining above, white underneath. *Syringa*, from surigou, a pipe, on account of the uses which the Turks make of its tubular branches.

4. *Acacia graveolens*, strong scented. Polygamia, Monœcia. Leguminosæ. To Mr. ALLAN CUNNINGHAM we are indebted for a knowledge of the present species; who found it on the margins of rivulets, in the neighbourhood of Hobart Town, Van Dieman's Land, where it was observed in flower and fruit in the month of February. From the seeds which were collected at that period, plants were raised in the King's Garden at Kew. It forms a twiggy shrub in the greenhouse, with angular brown and slightly viscid branches. Leaves alternate, two to four inches long, narrow lanceolate, rigid. Flowers collected into dense heads, the size of a large pea, standing in pairs, yellow. Culture: soil, sandy loam and peat. Increased by cuttings. It requires an airy part of the greenhouse. *Acacia* from Akazo, to sharpen; many species being thorny.

5. *Fritillaria minor*. Lesser Altaic Fritillary, Hexandria Monogynia. Liliaceæ. Of the genus *Fritillaria*, so called from *fritillus*, a dice-box, on account of the shape of the flower, though the chequered blossom rather recalls the idea of a dice-board. Nineteen species are enumerated by SPRENGEL, all remarkable for their large and gracefully drooping flowers, which render them universal favourites with cultivators. Of these, the greater number, perhaps the only legitimate species, are natives of middle or Southern Europe, or Northern Asia. The present new species was discovered by Professor LEDEBOUR, in pastures of the Altai Mountains, and flowered at Carlowie, near Edinburgh, early in May of the present year. Flowers nodding,

from one to three, dark blood red, yellow and distinctly variegated within. *Fritillaria*,—see the beginning of the above remarks.

6. *Pimelea longiflora*. Long-flowered, Diandria Monogynia. Thymelææ. The vegetable inhabitants of New South Wales being in general readily cultivated in peat earth, and easily increased by cuttings, have been in great request for the greenhouse and conservatory, and among them are the different species of *Pimelea*, of which thirty-four species are enumerated by Mr. BROWN, though thirteen only have hitherto been known amongst British cultivators. The present species was introduced to our gardens by Mr. FRAZER, from the southern shores of New Holland, and is rendered beautiful by the comparatively large and globose heads of pure white blossoms terminating the slender and wavy branches. It bloomed in the Glasgow Botanic Garden in June. The plant grows four feet high, or upwards. Culture: increased by cuttings; soil, sandy peat.

7. *Ficus acuminata*. Sharp pointed Fig. Polygamia Diœcia. Urticææ. The genus of the Figs is one of the most extensive among plants, chiefly inhabiting the tropics, many of the species constituting trees of gigantic height, no less remarkable in their fructification than in the sheathing stipules and milky juice, and bearing a great affinity to the Bread-Fruit (*Arto carpus*). *Ficus elastica*, and other species probably, yields Caoutchouc: a few afford esculent fruits, chiefly the common cultivated Fig, *Ficus carica*, and the Sycamore of the Scriptures, *Ficus sycamorus*, whilst the *F. religiosa*, Banyan Tree, or Sacred Fig of the Hindoos, is one of the many astonishing features of Indian vegetation:

—————“ its wondrous branch
Bent down to earth, new stems can launch,
Which upward spring to bend again,
And form a forest o’er the plain.”

No where, perhaps, do the species of *Ficus* so much abound as in the tropical parts of Asia, and Dr. WALLICH alone enumerates in his Catalogue no less than one hundred and five species. The present species has been long cultivated in the Glasgow Botanic Garden, under the appropriate name of *F. cerasiformis*. It is a handsome plant, remarkable for its solitary, pedunculated, pendant, and tempting-looking fruit. *Ficus*: this THEIS traces to the Celtic Figuezen, a fig.

—————

Edwards's Botanical Register. Edited by JOHN LINDLEY, Esq.,
Professor of Botany in the London University. Coloured
4s. ; plain, 3s.

1. *Epidendrum oncidoides*. Oncidium flowered. Gynandria, Monandria, Orchidææ. For this noble plant we are indebted to RICHARD HARRISON, Esq. of Liverpool. It has so much the appearance of *Oncidium luridum*, that we at first sight took it for a new species of that genus; it is, however, a genuine *Epidendrum*, nearly allied to *E. odoratissimum* with which it agrees in its delicious and powerful fragrance, similar to the perfume of violets and roses. No doubt the plant is a native of some part of South America. It has been many years in this country, and is in many collections, but it never flowered in this country before that of Mr. HARRISON's. We think it is one of the most interesting species yet figured; for it is not only handsome, singular, and fragrant, but its flowers are very durable, remaining in perfection for at least a fortnight. Flowers, sepals and petals, dark yellow, with brownish purple ends. Labellum dark yellow. Culture, as other orchideous plants. *Epidendrum*, see page 12.

2. *Anthocersis viscosa*, clammy. Didynamia Angiospermia. Scrophularinææ. This plant is a native of the southern coast of New Holland, where it was first found by Dr. BROWN. It is a handsome shrub, with dark green neat leaves; and if kept in health is a desirable greenhouse plant. Being of a soft nature,

never forming any hard wood, or well ripened shoots, it is peculiarly liable to injury from over-watering, or from the earth in which it is planted becoming saturated; if this happens, it immediately sickens, its leaves losing their dark green colour. Flowers, white. Anthocerssi, from Kerkis, a ray, and anthos, a flower, from the radiated form of flower, being star-like in appearance.

3. *Leptotes bicolor*. Two coloured flowered Gynandria Monandria. Orchideæ. This pretty little plant flowered in April, 1833, in the Stove of Mrs. ARNOLD HARRISON. It is a native of the Organ Mountains of Brazil. Its habit seems to be to grow among broken potsherds, decayed vegetable matter, and moss; treated in this way, a small portion will strike root. Flowers. Racemes three flowered sepals white, Labellum white, and blood coloured. Column green. Leptotes from Leptos, slender; in allusion to the leaves.

4. *Petunia violacea*. Purple Petunia. Pentandria Monogynia. Solanæ. Synonyms. *Salpiglossis integrifolia*. *Nierembergia Phænicea*. See page 144.

We adopt the first name in preference, for the following reasons. *Salpiglossis* is a genus now common in this country, with didynamous stamens and an imbricated corolla, two highly important characters, which are wanting in this plant. *Nierembergia* is, like it, pentandrous; but the peculiar form of the corolla, the absence of teeth upon the disk and the singular lunate stigma of that genus render it impossible to place this in *Nierembergia* without violating every principle of generic distinction: if there is any one genus in Solanæ more natural and more positively defined by obvious and important characters than another, it is *Nierembergia* properly so called, with which this ought on no account to be confounded. But from *Petunia*, of which the now common *Petunia*, *nyctaginiflora* may be taken as the type, the plant before us differs in nothing whatever except the inflated tube of its corolla, and the size of its embryo: *Petunia* is remarkable for the thickened bases of its filaments, which all arise upon the same plane from the middle of the tube, for its capitate stigma, the oblique limb of its corolla, the leafy segments of its calyx, and for its disk, which bears a distinct tooth on each side where it touches the suture of the ovary. Now there is not one of these highly characteristic marks in which this plant differs from *Petunia*, to which we, without any scruple refer it.

DR. LINDLEY.

5. *Calceolaria sessilis*. Sessile leaved. Deandria Monogynia. Scrophularinæ. The Hon. and Rev. W. HERBERT raised this species from seeds collected by Mr. CUMING. It is always a neat looking herbaceous species, with a tendency to become shrubby, and is very beautiful when growing vigorously in the open border. Its habits are no doubt those of *C. integrifolia*, to which it is nearly related; it is readily known by the hoary colour of the under side of the leaves, and by the upper leaves being generally sessile, with almost triangular bases. *Calceolaria*, see page 107.

6. *Hibiscus splendens*. Splendid Hibiscus. Monadelphia Polyandria. Malvaceæ. A native of New Holland, whence seeds were sent by the late Mr. FRAZER in 1828. In this country it is a stove plant, requiring plenty of light and atmospheric moisture during its season of growth. It flowers in August, and is readily propagated by cuttings. Dr. GRAHAM first described the species from a plant that flowered in the Edinburgh Botanic Garden; and speaking of its great beauty, quotes the following passage from one of Mr. FRAZER's letters:—"This I consider the King of all the known Australian plants. I have seen it twenty-two feet and a half high; the flowers this year measured nine inches across; they were of the most delicate pink and crimson colour, and literally covered the whole plant." *Hibiscus* from Ibis, a Stork; said to chew this plant, and inject as a clyster.

7. *Oxalis divergens*. Diverging Wood Sorrel. Decandria, Pentagynia. Oxalideæ. A native of Mexico, whence bulbs were sent, a few years since, to the Horticultural Society, by Mr. GRAHAM. It is easily cultivated under a frame which excludes all wet and very severe cold; and like all the American species of the same habit, prefers the open soil to the confinement of a pot. It flowers from June to September. Leaves wedge shaped. Scape many flowered, of a pure white.

Sweet's British Flower Garden, coloured, 3s.; plain, 2s. 3d.

Edited by D. DON, Esq., Librarian to the Linnæan Society.

1. *Habranthus miniatus*. Hexandria, Monogynia. Amaryllideæ. This very distinct species, well characterised by its perfectly smooth and even scape, and many flowered spathe, is a native of Chili, and was introduced last year from bulbs, collected in that country by Mr. CUMING. Flowers, umbel of, from two to five flowers, of a red colour, green at the centre. It requires a mixture of vegetable earth and sand, and will doubtless, like most bulbous plants from the same country, succeed well in the open air in a warm sheltered border. *Habranthus* from Habras, delicate; and *anthos* a flower.

2. *Chetanthera serrata*. Tooth leaved. Syngenesia, Polygamia, Superflua, Compositæ. The plant is perennial, with a somewhat woody caudex, and has been but very lately introduced from Chili, where it is found growing abundantly in sandy places, particularly in the Provinces of Concepcion, Rere, and Santiago. The plant has been raised from seeds at Mr. WRIGHT'S Nursery, received from Mr. CUMING. The plant is impatient of wet, and should be protected in a pit, or frame, in Winter, and may be increased by slips or seeds. Flowers. The florets of the disk are of an orange yellow, tube green. Florets of the ray of a brilliant yellow, purplish at the underside. The stems rise from the ground about three inches. Blooms in July and August. *Chetanthera* from Chaite, a bristle; and *anthera*, an anther.

3. *Polygala thesioides*. Flax leaved milkwort. Diadelphia octandria. Polygalæ. Synonyms, *P. gridioides*, *P. cærulea*. The plant is suffruticose, (under shrub,) growing about nine inches high, with many upright, simple, dark purple branches. This pretty little *Polygala* is a native of Valparaiso, in Chile, whence it was introduced last year, seeds being sent by Mr. Cuming. The flowers are of a deep blue, marked with deeper spots. The plant appears to delight in a sandy soil, and may be increased both by cuttings and seeds. *Polygala*, from Poly, much, and gala, milk.

4. *Fuchsia macrostema*; var. *globosa*. Balloon flowered Fuchsia. Octandria Monogynia. Onograriæ. The proneness to variation evident in this, as well as in the species of many other genera of South American plants, has convinced me that *F. gracilis*, and *conica*, are not entitled to be regarded in any other light than as mere varieties of *F. macrostema*. D. DON.

The Botanical Cabinet, 5s., ten plates, coloured; 2s. 6d. partly coloured. Edited by Messrs. LODDIGES'S.

NO. FOR OCTOBER.—(OMITTED IN OUR LAST.)

1. *Erica sordida*. Octandria Monogynia Ericæ. This species is a native of the Cape of Good Hope. It was introduced in 1810, and is of free growth, flowering in June and July. Flowers pale red, tube one inch and a half long. Culture.—It requires the usual airy Greenhouse treatment, and is increased with facility by cuttings. Soil, sandy peat, *Erica*, see page 138.

2. *Camellia Japonica*, var. *imbricata*. Monadelphia Polyandria, Camelliæ. A native of China, introduced to the Garden of the London Horticultural Society in 1824, by their collector, Mr. PARKES. It is a free growing kind, with rather loose growing branches: it flowers early, and is amongst the finest of the varieties, being very large and double; also in some instances beautifully marked, although this is not always the case. They are of a rosy crimson, striped or marked with white. Culture. As usual. *Camellia*, from GEORGE JOSEPH KAMEL, or CAMELLUS, a Jesuit.

3. *Sollya heterophylla*. Pentandria Monogynia. Pittosporæ. This plant is from the South-west coast of New Holland, and has been lately introduced. It is a very handsome climbing greenhouse plant, almost hardy enough to bear the open air. Flowers beautiful sky blue, and as they decay turn pale

purple. The size of the flowers is not much larger than the Lily of the Valley. It flowers from June to September. Culture: increased by cuttings or seeds; soil, loam and peat. Sollya, in compliment to A. H. SOLLY, Esq.

4. *Mimulus roseus*, rose-coloured Monkey-flower. Didynamia Angiosperma. Scrophulariæ. This very beautiful species is a native of Northern California, sent in 1831 by Mr. DOUGLAS to the London Horticultural Society: it is perennial, and flowers from July to September. Sometimes it perfects its seeds, by which, as also by cuttings, this elegant plant will increase, and probably soon become universally grown. Flowers: a fine rose, the bottoms of the petals marked with dark red, the interior of the tubulous part of the flower yellow spotted with red. Culture: it is well to set the pot in a pan of water, which will make the plant grow and flower much better; soil, light loam. *Mimulus*, see page 108.

5. *Bletia gracilis*, slender leaved. Gynandria Monandria. Orchidæ. This plant is believed to be a native of Mexico. Messrs. LODDIGES's received it in 1830. It is exceedingly slender in all its proportions; the leaves are of a purplish red colour, and the scape is about a foot in height, producing two or three flowers. Blooms in June. Flowers, greenish yellow. Culture: Messrs. LODDIGES's grow it in the stove, and potted in sandy peat and vegetable earth. It will occasionally admit of increase by separating the bulbs. *Bletia*, from LOUIS BLET, a Spanish apothecary and botanist.

6. *Salpiglossis integrifolia*, see page 144.

7. *Sisyrinchium iridifolium*, iris-leaved. Triandria Monogynia. Iridæ. This is a native of Chili. Messrs. LODDIGES's raised it from seeds received from Mr. CUMING. It produces its flowers in May; they last but a few hours, but a succession of them come out for a considerable time. It has been observed that flowers of short duration are usually splendid in colour; but however we may trace some general rules for this as for other things, still none are universal, exceptions being constantly found, showing how little we are able to understand about the laws of the beautiful works of God, each of which has some perfection, some excellence in form or colour, or some admirable quality to recommend it to our notice, and to excite our gratitude to the glorious Author of our being, the Fountain of all real unfading happiness and joy.—This species flowers in May. The flowers are white, suffused with yellow and red centre, about an inch across. Culture: increased by seeds, or dividing the roots; the plant should be preserved in a greenhouse. *Sisyrinchium*, from Sys, pig or hog; and rhygchos, a snout.

8. *Lupinus lepidus*. Diadelphia Decandria. Leguminosæ. A very pretty little perennial species, a native of North West America, introduced by Mr. DOUGLAS to the garden of the London Horticultural Society. It flowers during the summer months, and does not often exceed six or nine inches in height. Flowers: pale blue, slightly tinged with yellow at the bottom of the petals. Plant very hairy. Culture: increased by seeds; it is quite hardy. *Lupinus*, see page 92.

NO. FOR NOVEMBER.

1. *Fuchsia globosa*. See page 69.

2. *Erica hispida*, rough. Octandria Monogynia. Ericæ. A native of the Cape of Good Hope. Messrs. LODDIGES's raised a single plant of it from seeds received from thence in 1792, and it flowered within two years afterwards. It is a slender quick-growing kind, making many loose branches, which produce numerous flowers near their tops in June and July. Flowers: rosy red, small. Culture: it requires an airy greenhouse, increases freely by cuttings; soil, sandy peat. *Erica*, see page 138.

3. *Callistachys retusa*, bent-leaved. Decandria Monogynia. Leguminosæ. This plant is a native of New Holland. It has been lately introduced, and flowered with Messrs. LODDIGES's in succession from June to August. It appears to grow to three or four feet in height, with a few strong branches, each producing a head of flowers. Flowers, deep yellow. The plant requires the greenhouse or conservatory, and is readily propagated by cuttings. Soil, loam and peat. *Callistachys*, from Kalos, beautiful, and stachys, spike—beautiful spike, referring to flowers.

4. *Oncidium pulchellum*, handsome. Gynandria, Monandria. Orchideæ. This delicate plant is a native of Demerara, growing on trees. Messrs. Loddiges's have had it several years, but it was not strong enough to bloom till March, 1833. In cultivation the flower-stem has been tied up to a stick, but we have no doubt its true mode of growth in the natural situation is hanging down, which is far more elegant. It continued in flower nearly two months, and has a delicate fragrance. It has constantly been kept in the stove, in a pot with vegetable earth and pieces of broken pot. It has not yet been increased. *Oncidium*, from Ogidion, a tubercle; two prominences on the lip of the flower.

5. *Stanhopea insignis*, noble-flowered. Gynandria, Monandria. Orchideæ. This singularly splendid flowering plant is a native of South America, introduced in 1826. Dr. LINDLEY, who suggested to us the name of *Ceratophilus* to another species, having since discovered that the name had been already applied by BLUME to a different plant, has now placed it to the genus *Stanhopea*, as originally constituted by Dr. HOOKER, in *Curtis's Magazine*. The plant appears to grow naturally upon trees, with the flowers hanging down. Flowers: four inches long, various colours in each, as yellow, green, white, and red; the flower is beautifully spotted with red. Seldom have we witnessed a more extraordinary subject in the size and form of its flowers, as well as the curious markings of their different parts; but really both the number and the magnificence of the plants of this class become more and more astounding: they actually comprise a botanical world in themselves. Dr. LINDLEY, in the first three parts of his elaborate *Genera and Species*, has described upwards of a thousand, and this is to be considered only as the beginning of the work, for new genera and species are constantly pouring in from all quarters. The present species requires the stove, and should be potted in vegetable earth. It flowers in September and October.

6. *Thysanotus junceus*, rush-leaved. Hexandria, Monogynia. Asphodeleæ. A native of New Holland, growing near Port Jackson; it was introduced into this country in 1820, but has been lost for several years, till Messrs. Loddiges's received roots and seeds of it again in 1832: some of the former flowered in June and July following. The flowers open only once, remaining for a few hours, but more are produced for a considerable time in succession. The delicacy and splendour of the flowers is surprising: their colour also peculiarly pleasing and attractive,—all produced from a little tuft of herbage, which when not in bloom it is difficult to distinguish from common grass. Overflowing with elegance and brilliancy, and exquisite skill, are all the works of the gracious Creator, in variety constantly new, in beauty always charming,—awakening the mind to cheerful praise of our most Beneficent Father, who thus in a thousand and a thousand delightful ways is soothing the ruggedness of life's toilsome path, and still endearing Himself more and more to the adoring hearts of his children.—Flowers, about one inch and a half across, of a fine purple; a dark broad stripe of velvety hue, up the centre of each petal; the petals are very much fringed at the edges, which gives the flowers a most interesting and beautiful appearance. Culture: the plant must be kept in an airy greenhouse, potted in sandy peat earth; it does not appear likely to increase, unless seeds will ripen, which has not hitherto been the case. *Thysanotus*, from *Thysanotus*, fringed, three inner sepals.

7. *Goodyera repens*, creeping. Gynandria, Monandria. Orchideæ. This is a native of the northern parts of Europe and America. It is found, according to Sir JAMES SMITH, in Scotland, growing in mossy Alpine woods, but is rare. Flowers small, white, coming in June and July. Culture: it may be cultivated in a pot in peat earth, placed under a shady wall, and will sometimes increase by separating the creeping roots. *Goodyera*, from JOHN GOODYER, an obscure British botanist.

8. *Spiraea grandiflora*. Icosandria, Pentagynia. Roseaceæ. This very beautiful hardy shrub is a native of Kamtschatka. Messrs. Loddiges's raised it from seeds sent to us by Mr. BUSCH, in 1826. It bears a resemblance to *Spiraea salicifolia*, but is a much finer plant, and the flowers are double the size. Flowers, fine rose-coloured, and form a handsome spike. Culture: it flourishes in the open ground, in light loamy soil, and flowers in July. Increased by layers or cuttings. *Spiraea*, from *Spairo*, a cord; flexile branches.

9. *Tropæolum pentaphyllum*. Five leaved. Indian Cress (*Nasturtium*). Octandria Monogynia. Tropeoleæ. This plant has been lately introduced from Buenos Ayres. It has a tuberous root, from whence arises a climbing stem to the height of two feet or more, producing abundance of flowers during the summer months. It requires the greenhouse protection, and may be increased by cuttings, and should be potted in rich loamy soil. Flowers, a fine light red; the end of the petals green. The flowers are very singular and handsome. *Tropæolum*, from *Tropæum*, a trophy; leaf and flower.

10. *Torenia scabra*. Didynamia, Angiospermia. Scrophularinæ. A native of New Holland; introduced in 1831. It grows rapidly, and forms a good sized bush, with many succulent branches, each producing plenty of flowers, which continue successively from June till Autumn. Flowers campanulate, one inch across, pale blue. Culture: it requires a warm greenhouse, increases readily by cuttings, and sometimes bears seeds; the soil should be a rich loam. *Torenia*, in compliment to the Rev. OLEF TOREN, a Swedish botanist.

The Botanic Garden. Monthly, 1s. 6d. large; 1s. small, coloured.

Edited by Mr. B. MAUND.

1. *Dianthus superbus*. Superb Pink. Decandria Trigynia. Caryophyllææ. Old authors extol this species for its fragrance. Parkinson calls it the feathered pink of Austria, and says it is of a most fragrant scent. The *Dianthus superbus* is of short duration, which accounts for its scarcity in small collections. It requires to be propagated annually, by layers or by cuttings. It merits a place in every flower garden. Its pretty pale lilac-coloured feathery flowers, being produced abundantly, gives the plant a most pleasing appearance, in addition to their perfume. There is a white variety of this species; but it is rare. The plant grows from two to three feet high, and flowers from June to September. *Dianthus*, from *dias*, Jove; and *anthos*, a flower.

2. *Lilium martagon*, white martagon. Hexandria Monogynia. Tulipacææ. The white variety of martagon is of somewhat more delicate habit than the common, and of a smaller growth. It succeeds best in sandy loam. *Lilium*: the Greeks are supposed to have derived their *Leirion*, a lily, from *Leios*, handsome.

3. *Tropæolum majus*, greater Nasturtium, var. *sanguineum*, bloody. Octandria, Monogynia. Tropeoleæ. See page 154.

4. *Eryngium alpinum*, Alpine Eryngo. Pentandria, Digynia. Umbelliferæ. The *Eryngium alpinum*, with its fine feathery involucre beautifully tinted with blue, long continuance in perfection, and general singularity of effect, is worthy of a place in every garden. Culture: it may be propagated by division of roots, or by short cuttings of them, and also by seeds. *Eryngium*, from *Eryggano*, to belch; expels wind.

On the Cultivation of Epiphytes of the Orchis Tribe. By Dr.

LINDLEY, F.R.S. &c., Assistant Secretary.

This class of plants is comparatively new to Europe, having been generally speedily lost after their introduction. The *Vanilla* seems to have been almost the only species that was known in England in the time of Miller, and little more than twenty were to be found in the Kew Garden during the last ten years of the last century. Not more than twelve or fourteen species had been added to the same garden, in the first thirteen years of the present century; and only nineteen species are mentioned as in the Berlin Botanic Garden, one of the richest in Europe, in 1822.

It was supposed that this want of success was owing to some peculiar diffi-

culty in their cultivation; and it was therefore resolved that an attempt should be made to overcome this difficulty, in the Chiswick Garden. Similar attempts, before or about the same time, were made in the stoves of Messrs. LONDIGES of Hackney, Messrs. RICHARD and ARNOLD HARRISON of Liverpool, Mr. CATTLEY of Barnet, and others; so that the total number of species of this family of plants found in Britain at the time Dr. LINDLEY's paper was read, was not less than 200; but in Dr. LINDLEY's recent publication, upwards of 1000 species are described; while the catalogue of the Paris Garden, made up to 1829, enumerates only nineteen.

The result of various experiments to ascertain the best soil and climate for these plants may be said to amount to this:—"That a well-drained soil, shade, a very high temperature, and an atmosphere nearly saturated with humidity, are the conditions that are requisite to ensure their successful cultivation, and that soil itself is of little importance to them. We have used common garden earth, lime rubbish, gravel, decayed vegetable matter, and moss, and all with equal success, provided the drainage was effectual; and we have found all these equally useless when the drainage was not attended to; a circumstance which is, no doubt, due to the succulent nature of the plants, and to the very imperfect means that most of them possess of parting with superfluous moisture: in consequence of the compact nature of their cuticular tissue, and of the minute size, or small number, of stomata or evaporating pores. We have found that no soil or temperature would nourish them in drought, and that any soil was good when the temperature and atmospheric humidity were carefully regulated. To speak very accurately on these points, I should say, that the mean temperature of the day ought to be 97° or thereabouts, and that its humidity should be at the point of saturation, or nearly so. We have found that the same plants which refused to grow when placed upon the stage of a hothouse, the air of which possessed the necessary conditions of heat and vapour, flourished with all their native luxuriance, if the pots, in which they were planted, were suspended freely by wires from the roof; a difference which, no doubt, depended essentially upon drainage; and we have seen that moss alone would, under these circumstances, maintain in perfect health plants which the most carefully managed soil appeared to kill, if the humidity of the air and the drainage were unattended to.

"Having originally taken great interest in this inquiry, I have for some years been collecting information relating to it, and I find that if we had had, in the beginning, the same knowledge of the native habits of orchideous epiphytes that we now possess, those conclusions, that are now the result of many years careful and expensive enquiry, would have been obvious inferences prior to any experiments whatever having been instituted. The facts that I have collected are the following:—

"Orchideous epiphytes grow naturally upon trees, in the recesses of tropical forests: they establish themselves in the forks of branches, and vegetate amidst masses of decayed vegetable and animal matter. In consequence of their position, there cannot possibly be any accumulation of moisture about the roots. They will also grow equally well upon rocks, and stones in similar situations. Mr. W. HARRISON, of Rio Janeiro, is mentioned by one of the Society's collectors, who visited him, to cultivate, with the most perfect success, above seventy species upon a wall in his garden at Boto Fozo.

"We see some of them germinate and grow most luxuriantly in damp places, in the stove, upon the sides of the garden pots, and among gravel, and Dr. WALLICH found them in all cases growing equally well upon trees and stones, provided the latter had a certain quantity of mould and moss adhering to them.

"In the Botanic Garden at Calcutta they are cultivated with success in raised beds of solid brickwork, so contrived as to secure the most perfect drainage; the soil being rich vegetable matter, mixed with at least two thirds small pebbles, and covered with a dense layer of moss.

"Shade seems essential to them: their natural situation being in deep forests, or among the branches of growing trees. In Brazil they exclusively occupy damp woods and rich valleys, among vegetation of the most luxuriant description, by which they are embowered. In Nipal I learn from Dr. WALLICH

that Orchideous epiphytes grow in company with ferns; and the thicker the forest, the more stately the trees, the richer and blacker the natural soil, the more profuse the Orchideæ and ferns upon them. There they flourish by the sides of dripping springs, in deep shady recesses, in inconceivable quantity, and with an astonishing degree of luxuriance.

"In the Botanic Garden at Calcutta it is found that they thrive best under the shade of trees with dense but airy foliage, such as mimosas, especially the *Acacia stipulata*, the huge stem of which is the more remarkable when compared with the myriads of minute leaflets by which it is formed.

"High temperature and excessive humidity are together the other conditions essential to the well-being of these plants. The hottest countries, if dry, and the dampest, if cool, are destitute of them; while there is no instance of a country, both hot and damp, in which they do not swarm. This can readily be shown."

They are most abundant, in India, in the Malayan Archipelago, the mean temperature of which is between 77° and 78°; and the air is damp to saturation. In Nipal they are only found upon the sides of the lower mountains, where they vegetate among clouds and constant showers. On the continent of India they are almost unknown; because there, though the mean temperature is 80°, the air is dry. In the Calcutta Garden, they grow vigorously in the rainy season, and perish in the hot season. In the hot humid climate of the Isle of France and Madagascar, they exist in vast quantities. In Africa they are rare, except at Sierra Leone, where the air is moist as well as hot; at the Cape they are wholly unknown.

"In America, their favourite station, according to HUMROLDT, is in the gorges of the Andes of Mexico, new Granada, Quito, and Peru, where the air is mild and humid, and the mean temperature 63° to 67° Fahr. (17° to 19° cent.) In these localities they are so abundant, that, according to the authors of the *Flora Peruviana*, above 1000 species might be found in Tarma, Huanuco, and Xanxa alone. They are not seen farther north than Florida, where a single species, *Epidendrum conopseum*, is found on the *Magnolia*; but it is well known that the vicinity of the Gulf of Mexico, and the effects of the Gulf Stream, give the vegetation of Florida a tropical rather than extra-tropical appearance. In that country this solitary representation of tropical Orchideæ exists in the same region as myriads of *Tillandsia usneoides*, which usually vegetates beneath the influence of the dampest tropical atmosphere."

In the West Indian Islands, particularly Jamaica and Trinidad, and on the lower ranges of hills more especially, they are abundant. At Rio Janeiro, where the woods are so damp that it is difficult to dry plants, orchideous epiphytes are found in inconceivable multitudes; but at Buenos Ayres, where the air is dry, they are unknown. In the high dry land of Mendoza, the aridity is still greater; and there the whole order of orchideous epiphytes almost entirely disappears. On the west coast of South America, they are unknown as high as Lower Peru; the whole of that region being extremely arid, with the exception of a few valleys. There are two species of Orchideæ found in the Mexican Andes, which are exceptions to the general conditions for the growth of the order; two species in Japan, which will grow in a low temperature; and some in New Holland, which thrive in a mean heat of 66° 6'.—*Hort. Soc. Trans.*

On Raising Native Hyacinths. By MR. RYAN, Gardener to SAMUEL WHITE, Esq. M.P.

I have been very successful in raising Hyacinths from offsets. I find the plants which have flowered in glasses or pots produce better offsets than those raised in beds; these, together with the mother and now reduced bulb, I plant at the usual season; the old bulb affords considerable nourishment to the young plants, which rise with great strength the following spring. When the leaves assume a yellow hue, the plants are to be taken up and replanted the

same day in prepared beds, the stronger by themselves. The strongest plants will shew blossoms the following spring, some of them having from twelve to twenty bells or pips; these should be reduced to three or four, which should be left on the extremity to draw up the sap: were the whole suffered to remain, the plant would be much exhausted in flowering; and if wholly taken off, it receives a great check.

The bulbs are again to be taken up in October, and replanted as before, not permitting them to remain any time out of the ground. Moisture seems essential to the perfection of the Hyacinth; and I find that those which remain in the ground, and of course subject to its influence, are not at any time affected with the ring disease, by which many of those which are placed in the store are lost every season. This subject is well deserving of attention of Horticultural Societies, who should award prizes to the persons in their respective districts producing the best blow, taking variety and number of roots into account; for in my opinion, as good Hyacinths may be raised in this country, as in Holland, or any where else; as a proof of this I may just mention that, being at one time, a few years since, in want of a Hyacinth to make up the requisite number to qualify me to compete for the Horticultural Society's prize, I took one of my native plants, and this turned out to be the identical one for which the premium was awarded, although in competition with hundreds of bulbs which had been imported from Holland the preceding autumn; indeed I do not hesitate to assert, that any one making trial of the method now recommended, will have the satisfaction of beholding as good a blow as he can produce from imported bulbs.

I use a compost made up in the following manner:—One barrowful of loam from rocky places; one ditto well rotted cow-dung; this should not be less if possible than three years old; one-third of a barrow of mould, produced from rotted tree leaves, and about a fifth of a barrow from an old cucumber bed; with this, the bed is to be made two and a half feet deep, and the surface covered with turf-mould, to preserve the bulbs from frost.—*Irish Farmer and Gardener's Magazine.*

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON FLOWERING AMARYLLIS JACOBÆ.—I should feel extremely obliged if any of the numerous subscribers to that excellent publication the *Floricultural Cabinet* would give me any information on the mode of treatment I am to use to cause the *Amaryllis Jacobæ* to flower, having had the bulbs by me nearly three years, but cannot get them to flower.

THOS. JONES.

Corphilly, Oct. 8th, 1833.

ON SAW-DUST.—Can saw-dust (from all sorts of timber which has laid for years, till it has become, to all appearance, a black mould) be used beneficially as a mould, or manure to plants and vegetables.

S. C. A.

ON DESTROYING ANTS.—Can you, or any of your readers, inform me through the medium of your very useful and interesting work, how I can effectually destroy ants. Some parts of my flower garden are so overrun with them, that every thing I plant there dies in a day or two. I have no doubt many people, as well as myself, will be much benefitted if any method can be found by which our gardens can be cleaned from such destructive little insects.

F. L. S.

ON GRAVELLY SOIL.—I should be highly obliged if any of your numerous readers would furnish me with any plan by which a gravelly soil can be rendered productive, at a small expense, for a kitchen garden. I recollect that to

burn clay is a certain method of fertilizing it, which induces me to hope I may through the instrumentality of your publications find a remedy for the soil I describe.

STEPHEN CANNON.

ON THE CULTURE OF DUTCH BULBS.—An article on the growth of bulbs such as Hyacinths, Narcissuses, &c. in pots is very much wanted, and if given would be very highly acceptable to a numerous class of the readers of the *Floricultural Cabinet*. I hope some of your numerous correspondents will take the matter in hand.

J. B. DENTON.

ON THE CULTIVATION OF GLOXINIAS.—You would much oblige me by the following request in the *Floricultural Cabinet*:—I am most anxious to obtain information on the growth and mode of preservation, as a greenhouse plant, of that beautiful tribe of flowers, *Gloxinia maculata*, *G. speciosa*, &c. Did I not think but that some other or others of its readers, would, in some measure, be gratified by an answer to my query, I should not presume to thus take up part (however trivial) of pages, which have hitherto been devoted, with such capital effect, to instructive intelligence on subjects which you, in their primitive development, promised they should contain. I congratulate you on the fulfilment of your word.

J. BAILEY DENTON.

P.S. The plants I now have, I perceive, are daily decaying leaf by leaf from moisture or damp.

[NOTE.—We hope some of our correspondents will attend to the request of Mr. DENTON at an early opportunity.—CONDUCTOR.]

ANSWERS.

ON *TIGRIDIA PAVONIA*, BY SNOWDROP.—This plant has always succeeded very well with me, by planting the tubers in a bed the beginning of March, about three inches apart and three inches deep, and I have enjoyed a constant succession of bloom; but however large the bed, any one would be disappointed who expected that every plant would daily throw out a flower. The tubers are very liable to rot, and great care should be taken to keep them dry after they are taken up, which may be done as soon as the foliage begins to decay.

SNOWDROP.

ANSWER TO MR. JOHN EMORY, OF PIMLICO, PAGE 185, ON THE TIPPED DAHLIA.—I think I cannot better answer your respectable correspondent, Mr. EMORY, than by giving a short history of the Dahlia in question, which was named by JOHN WARD, Esq. "The Incomparable," on account of its eccentricity. I raised it from seed gathered from an old sort known here as Wells's Comet, in 1827. At first, I thought it very much resembled the sort it sprung from; but I observed many buds on the south side of the plant of a pale lilac colour, and when they came into bloom I was surprised to find them tipped with white. Many individuals supposed the tipping was produced by some chemical process. The year following I struck a considerable number from cuttings, and then divided the old roots according to the number of shoots, all of which I planted in various situations. Some were planted upon an old onion bed, which had the year before been manured with night soil, and nearly all the flowers tipped. Others were planted on a north aspect, upon the site where an old thorn hedge had been stubbed, and all of them tipped. Others were planted in the regular way, and some tipped, and others did not. The year following, upon the above two spots, scarcely any tipped. I was advised to try peat, river sand, and half-rotten dung, and again all were self colours. I gave Mr. PAXTON (gardener to his Grace the Duke of Devonshire) a plant, which was planted on a mound of rotten leaves, sand, &c., and every bloom was most beautifully tipped; they were very much admired. The following year Mr. PAXTON set a large quantity in the most conspicuous places, and to his great disappointment there was not a single tipped bloom. Any plan that may be taken cannot be depended upon: however, I would recommend maiden soil, rotten leaves, sand, and a little half-rotten dung mixed together, to plant in; and if the ground should be strong and wet, I would recommend a quantity of stones to be put, to act as a drainage.—If the plant is grown too luxuriant, it seldom or ever produces tipped flowers. The more dwarf it is grown the better. Many persons in this neighbourhood

plant them in 12-sized pots, and at the proper season (say about the 12th of May) plunge the pot where they wish them to bloom, and frequently cut off the fibres which grow over the edge of the pot. This plan has often been very successful.

JAMES LEVICK.

Skeffield, Oct. 17th, 1833.

ON THE TREATMENT OF LEVICK'S INCOMPARABLE, OR TIPPED DAHLIA.—Observing some of the correspondents to the *Floricultural Cabinet* are desirous of information on a method of treatment calculated to grow the Incomparable Dahlia with tipped flowers, I send you the method which I have adopted, and by which every blossom becomes beautifully tipped. Instead of planting in the soil of the border, I dig out a large hole, fill it up with well-rotted dung, and then plant the Dahlia therein. After having planted the Dahlia, I spread two or three inches of soil over the dung to make a neat finish, as well as to prevent evaporation from the dung. The above method has succeeded to my utmost expectations.

WILLIAM BARRATT.

Wakefield Nursery, Nov. 6th, 1833.

REPLY TO MR. REVELL'S REMARKS.—In reply to Mr. REVELL's observations, and entreaties to try his plan of piping Pinks, I tell him I tried it five or six years, and invariably found it fail, to the extent of at least two-thirds. I therefore pronounce it bad; and the best florists tell me it is impossible to succeed without some such precaution as I recommend. I see, upon referring to his article, page 101, that during the last four years he has piped the enormous quantity of 1200! Three hundred a year!! Incredible!!! This is really prodigious work for a commercial florist. I can account for Mr. REVELL's lack of custom in no other way than that perhaps he has nothing worth purchasing; for his own letter would certainly deter purchasers going to him, when he talks of his standard for Pinks being two inches. If such were brought or sent here, they would be cast upon the muck-heap to rot, or (where it would be more certain destruction) consigned to some quick lime, not omitting Revell's Lady Wharncliffe, a flower of somewhat ten petals, and one of those so foul that the engraver was ashamed to delineate it. As regards the oil-cake I advise, he shows his utter ignorance of its nature and properties, or he would never advise giving rape-cake to the cows. I tell Mr. REVELL I can and do grow Pinks to the size of twelve inches in circumference; nor am I the only grower who attains that size. A friend has just brought me the *Norwich Mercury*, which I had never before seen, and from which I extract the following account of their visit to Mr. THURTELL's garden. Of the editors or Mr. THURTELL I know nothing but by report, which is, that they are men of the strictest integrity:—"We attended Mr. GEORGE THURTELL's display at his grounds, and he preserves the same superiority. His beds of Pinks contained some exquisite flowers for size, colour, and regularity. One (Foster's William IV.) must have expanded its petals to a circumference of AT LEAST twelve inches."—What will REVELL's astonishment and incredulity say to this? Perhaps he may affirm the editors never saw them, or that, through the instrumentality of some magician, two of his (REVELL's) superb flowers had been converted into one, and by the same means conveyed into Mr. THURTELL's bed.

I trust I have exculpated myself from Mr. REVELL's charge of exaggeration in the minds of most of your readers. My sole object in sending from time to time my practical results, is, that florists' flowers may be larger and better grown than at present, and that all small and bad flowers may be cast into oblivion, and those only retained that are of sterling merit. Would such a list be acceptable to your readers? I must beg to thank you for the space this will occupy. I send you the paper from which I have made the above extract, that Mr. REVELL may see it with his incredible eyes.

INNOVATOR.

[NOTE.—We referred to the *Norwich Mercury* newspaper of June 29th, 1833, and find the remarks, verbatim, as given above by our respected correspondent. The list alluded to would be most acceptable and useful to the readers of the *Cabinet*. We will thank our friend for one at his convenience. —CONDUCTOR.]

ANSWERS BY CONDUCTOR.

APRIL NUMBER, PAGE 46.—SNOWDROP asks if urine is applicable for the growth of plants. We have tried it in a diluted state, but however weak, its effects are injurious. Soap-suds, we find, is beneficial when occasionally given; the sediment is apt to form a crust upon the surface of the soil, from which circumstance the soil requires frequently to be stirred, otherwise the plants will become sickly. On the remarks about milk, (see page 184,) we hope our highly respected correspondent will favour us with the result of this practice.

APRIL NUMBER, PAGE 47.—A list of Hyacinths, &c. requested:—
HYACINTHS.

YELLOW.		Prince of Waterloo
Duo de Berri d'Or		Pyrene
Grand Alexander		Gloria florum supreme
Heroine		Duchess of Devonshire
Pure d'Or		Duchess of Richmond
BLUE.		Duchess of Portland
Bouquet Constant		RED.
Bouquet Pourpre		Amicable Elizabeth
Keizer Alexander		Von Deveron
L'importante		Ravisante
Nair veritable		Velours rouge
Sartorius		Josephine
WHITE.		Henrie Quartra
Elise		

CARNATIONS.

SCARLET BIZARRES.		Taylor's Festival
Wild's Perfection		Maudes Rowton
Waterhouse's Rising Sun		PURPLE FLAKES.
Walmsley's William the Fourth		Turner's Princess Charlotte
PINK BIZARRES.		Lascelles's Queen of Sheba
Wakefield's Paul Pry		Allway's Wonder of the World
Cartwright's Rainbow		PINK FLAKES.
Gregory's King Alfred		Plant's Lady Hood
SCARLET FLAKES.		Fletcher's Duchess of Devonshire
Pearson's Madame Mara		Tyso's Princess Victoria.

AURICULAS.

GREEN EDGED.		WHITE EDGED.
Booth's Freedom		Hughe's Pillar of Beauty
Stretche's Alexander		Lee's Bright Venus
Howard's Lord Nelson		Taylor's Glory
GREY EDGED.		SELFS.
Waterhouse's Conqueror of Europe		Grime's Flora's Flag
Grime's Privateer		Redman's Metropolitan
Kenyon's Ringleader		Scholes's Ned Lud

POLYANTHUSES.

Pearson's Alexander	Park's Lord Nelson
Waterhouse's George the Fourth	Clegg's Lord Crewe
Cartwright's Prince of Orange	Crownshaw's Invincible
Cox's Prince Regent	Timmin's Defiance
Buck's George the Fourth	Nicholson's Bang Europe
Collier's Princess Royal	Eckersley's Jolly Dragoon

PINKS.

PURPLE LACED.		Claudius
Lady Wharncliffe		Princess Charlotte
Lustre		BLACK AND WHITE.
Suarrow		Cicero
Brilliant		Premier
RED LACED.		Beauty of Flora
George the Fourth		Davey's Eclipse
Humphrey Cheetham		

TULIPS.

BIZARRES.
 Surpasse Catafalque
 Trafalgar
 Surpasse La Cantique
 Duc de Savoie

BYBLOEMENS.
 Boquet
 Incomparable

Bienfait
 Washington
 ROSES.
 Triomphe Royale
 Doolittle or Michael de Lisle
 Rose Vesta or Hebe
 Rose Unique

MAY NUMBER, PAGE 68.—*Lechenaultia formosum*.—This plant requires to be grown in peat soil, having plenty of drainage in the pot, and to plant it tolerably high; the centre of the ball to be half an inch higher than the rim of the pot. The plant must have very little water when it is not in a growing state. It requires an airy part of the greenhouse.

PAGE 68.—*Elichrysium proliferum*.—Cuttings strike very readily in moist heat, taking lateral shoots about three inches long, cutting them off close to the branch producing them. The plants should be grown in very sandy peat, draining well, and potting high. When the plants are not in a growing state, little water must be given.

PAGE 68.—*On an Assortment of Auriculas*.—An excellent selection of the most superb kinds, may be obtained of Mr. John Revell, Pitsmoor, Sheffield.

JULY NUMBER, PAGE 115.—We never saw *Ericas* (Heaths) prosper in dwelling-rooms. They require at all times a very free admission of air, and a much colder temperature than rooms are usually kept at.

PAGE 115.—*On Chrysanthemums*, by SNOWDROP.—We have not attempted to obtain seeds, but suppose it will be readily obtained by causing the plants to bloom as early in the season as possible. Impregnation of course must be attended to, and keep the flowers from wet for a week or more after this operation. We intend to give the result of some experiments we are making in order to obtain seeds. The Indian Yellow, and Indian White, bloom the best by having three or four year old plants, and bringing them on to flower early in the autumn. We never could bloom a plant raised the same year. We hope some of our readers, who may be well acquainted with a successful mode of blooming the above kinds, will favour us with the mode of treatment. We had not tried the plan of putting off cuttings in August previous to the present year, the suggestion of our correspondent leading us to it.

PAGE 115.—*On Ceratonia siliqua*, *St. John's Bread*.—The possibility of fruiting the plant in this country is certain, if the plant has proper protection and room to extend; but it would probably require a good space in a conservatory, and be unworthy the trial. We have it growing in the open air, but never expect to see it blossom or fruit. The plant belongs to the class Polygamia; order, Triæcia. The flowers are apetalous, but the calyx is purple, and thus exhibits a purple flower. The fruit grows from six to twelve inches long, about one inch broad, something in the form of a long pod of the common garden-bean. The fruit-pod is smooth; the seeds are flat and broad. The fruit being gathered and dried, is very palatable, the pulp being sweet and agreeable. The plant, it is said, abounds in Palestine, where there is such plenty of it that it supplies abundance of food for swine, similar to our acorns and beech-mat, as done in this country. The plant also grows in Spain, near Naples, in India, and other Eastern countries.

AUGUST NUMBER, PAGE 141.—We beg to inform Mr. Tew that articles are in hand on the treatment required with the plants named, and the communications will appear in an early Number of the next Volume.

PAGE 141.—*Cactus speciosissimus*.—We have never seen the plant flower when kept in a greenhouse altogether. It may be kept there at all times when not required to be pushed into bloom; but to effect this, it will be necessary to give it additional heat in some situation.

PAGE 141.—*On Watering Greenhouse Plants*.—An article will be given on it in the January Number of our *Cabinet*.

SEPTEMBER NUMBER, PAGE 163.—An article on forcing Roses is just come to hand, but too late for the present Number.

PAGE 163.—*Wistaria Consequana* (*Glycine Sinensis*).—The plant requires abundance of room for its roots. If turned out in a greenhouse or conservatory, having a good loamy or peat soil, and be well supplied with water, it will blossom profusely. In warm situations it will do well in the open air, training it, as a peach tree, against an open wall.

PAGE 163.—*On Plants for a Gravelly Situation, &c.*—We know of none to answer the wishes of R. N. equal to the Spurge Laurel, or Perriwinkle.

OCTOBER NUMBER, PAGE 184.—*On blooming Cactus speciosissimus*.—If the pot be very full of roots, repot in a rich loamy soil, mixed with lime rubbish from off old plastered walls, and drain well with potsherds. This will cause the plant to increase in size; but it will prevent its flowering for the present. After having ceased flowering very rapidly the plant should be removed from the stove to an out-door situation in summer; and to the greenhouse if at a season when too cold for being placed out of doors. After the plant has been out a few weeks, and then be placed in the stove heat, it will cause it to blossom immediately. After the blooming is over it may be removed to a cool situation for a time, and be again introduced into the stove for flowering as before. When repotting is required it should be done immediately after the plant has ceased flowering.

NOVEMBER NUMBER, PAGE 211.—*On German and China Asters*.—The German Asters, being but improved varieties of China Asters, require the same treatment. Sow in the last week of February on a slight hot-bed, or in pots placed in moist heat till the plants are up. Harden them gradually. When large enough to prick out, they should be done either upon a slight hot bed or border, where protection can be given in case of necessity. Prick them from four to six inches apart. In this situation they should remain till the weather is settled enough to venture them in the situations intended for blooming in. The soil of the border should be a fresh loam well enriched. When thus treated the plants will grow from two to three feet high, spreading proportionably, and producing a profusion of flowers of a superior size.

PAGE 211.—*On Gladiolus cardinalis*.—An article on its culture has been sent us, and will appear ere long.

PAGE 211.—*On Nerium splendens*.—The plant should be kept in a cool situation for a season, and then be brought into a high temperature, which will cause it to shew blossoms; it must bloom in the same heat. After the plant has done flowering, it should be repotted, kept cool during winter, and taken into high temperature, as before. The plant requires a free supply of water, always about the same temperature as the plant is placed in. Use plenty of drainage in potting. The soil must be a rich loam.

PAGE 211.—*On taking up Tulips, &c.*—We have allowed roots of Tulips to remain for twenty years without being taken up, any further than in autumn to separate offsets from the parent root; this has only been required once in six or eight years. Hyacinths will most likely answer the same way. The Tulips we have so treated always bloom well.

PAGE 211.—*Oxide of Manganese, &c.*—Our practice, or observations, relative to the subject of enquiry, are not such as to lead us to state any satisfactory and useful particulars. We will make experiment, and report the result.

REMARKS.

NEW LILY.—Being a subscriber to your *Floricultural Cabinet*, I have many times observed that you say you would feel obliged by any communications respecting rare and exotic plants. I, therefore, send you a drawing and a description of a plant of the genus of Lillies, which I have in my possession. It was raised from a seed which was brought from the East Indies in 1823. I have only seen one plant of the same sort, and that was raised at the same time as my own, and is in the possession of a relation of mine. I have not

been able by any means to know its name, although I have asked every gardener and florist whom I have met with. They all say that they never saw one of the sort before, and that it is really a very beautiful flower. I hope that I shall in return for my trouble have the pleasure of knowing the name of a plant which I so much admire, and which delights every one who has seen it, as much by its delicious perfume as by its beauty and rarity. It has a large bulbous root, and is seven years in coming to perfection from the time the seed is sown; for before that time the root bears no flower. The leaves grow directly from the root to the length of from three to four feet, the shape of which is represented in the drawing I send you. On a stalk which grows higher than the leaves, and which is about two-thirds of an inch in diameter, are situated the same number of flowers as there are leaves to the plant, which are in general six or seven; I think this is very remarkable. These flowers are of the same shape as the common white lily. Their colour is white with two beautiful scarlet stripes in each petal, and have six stamina and one pistil. I hope that the drawing which I have sent you will give you a better description of this beautiful flower, than I have been able to do by words. I should not have intruded on you had it not been for an advertisement which I saw to your correspondents in your Magazine, in which you say you would be glad if any of your florist friends would forward to you correct drawings of any new and good flowers. I have been wishing for a long time to bring forward this flower, which is I assure you a most splendid one, and which my pencil can badly imitate. If you have ever seen a plant of the sort, and heard its name, you will oblige me by an early answer.

I should wish to know from you direct, or through the medium of your magazine, the method of cultivating that beautiful flower the Auricula, whether you or any of your readers think that liquid manure is advisable, and of what I should compose my manure. I hope I have not been trespassing on your time; but I thought you would be glad to have this communication, and would like to notice any new and exotic plants. I have a seedling which I have raised from the seed of my old plant, and it is now about four years old; in three years more I hope it will flower, and is at present in a very flourishing condition.

AURICULA.

Launceston, August 21st 1833.

[NOTE.—We have an engraving of the Lily in hand.—CONDUCTOR.]

ON THE PROPERTIES OF THE HEART'S-EASE, OR PANSY.—1. The flower-stalk should be strong, straight, and of a proper height, so that the flower may be above the foliage of the plant.

2. The flower should be large, forming a circle; the petals should be large, flat, substantial, and as round as may be consistent with their peculiarly beautiful figure; their edges should be perfectly entire, without notch, fringe, or indentation.

3. The eye should be rather small, the stigma filling the open part of the eye.

4. The colours should be clear and distinct when diversified in the same flower, or brilliant and striking if it consists only of one colour, as purple, &c.; the colours should be permanent; and the eye not deeply pencilled.

REFERENCE TO PLATE.

Mimulus rivularis, var. *Youngii*.—Young's Rivulet Monkey Flower, was raised by Mr. PITT, gardener to ROBERT GODWIN RICKETTS, Esq. Twyford House, Winchester, Hampshire, and was received from Mr. PITT by Messrs. YOUNG's, Epsom, Surrey, in whose possession the stock of plants now are, and which, we understand, is considerable. The plant is an hybrid, raised between *Mimulus rivularis* and *Mimulus variegatus*, but partakes more of the habit of the former—like it, the present variety is a most profuse flowering plant, but of a more dwarf and compact habit. We have heard of another variety, viz. *Mimulus rivularis* var. *Smithii*, which is something similar to Messrs. YOUNG's, but on comparison, Mr. JAMES YOUNG informed us that the variety at Epsom

was of a much brighter yellow, the spots was somewhat bigger, and the flower altogether larger. The variety here figured is very striking and handsome, and will doubtless soon be introduced into flower gardens in general. We expect it will be eagerly sought after.

Pansies, Sky Blue and Yellow, and Allen's Queen Adelaide.—These varieties we find are inserted in Mr. Hogg's list, in his Supplementary Treatise on Flowers, and are grown by him at Paddington. Appleby's William Fourth variety was raised by Mr. APPLEBY, florist, St. James's Gardens, Doncaster, who possesses a stock of plants. Each of the kinds is very handsome, and highly deserving of introduction into the flower garden. Having inserted an article on the culture of Pansies in our last Number, and judging our readers would be gratified to see a few more varieties figured, induced us to give three in this Number of the *Cabinet*.

LIST OF ENGRAVINGS OF PLANTS,

In the Floricultural Cabinet, Vol. I.—1833.

FRONTISPIECE.—Carnations: Hird's Alpha, Purple Picotee; Tyso's Princess Victoria, Pink Flake; and Walmsley's William the Fourth, Scarlet Bizarre. (See page 187 for description of properties.)

	Page.	Reference.
<i>Adenophora verticillata</i>	45	46
Allen's Queen Adelaide, Pansy	217	248
Appleby's William the Fourth, Pansy	217	248
<i>Calceolaria Menziana</i>	145	167
<i>Wheeleri</i>	73	94
<i>Calophanes oblongifolia</i>	49	69
<i>Centranthus ruber</i>	73	94
Commander in Chief, Dahlia	1	18
<i>Oenothera tenella</i> , var. <i>tenuifolia</i>	144	121
<i>Fuchsia elegans</i>	193	216
<i>globosa</i>	69	69
<i>Hesperis speciosa</i>	20	20
<i>Iris pseud-acorus</i>	97	116
Lady Wharnccliffe, Pink	145	167
<i>Lobelia speciosa</i>	20	20
<i>Lotus corniculatus</i>	121	144
<i>Lupinus elegans</i>	97	115
<i>Lychnis sylvestris</i>	145	167
Maid of Athens, Pansy	193	216
<i>Mimulus rivularis</i> , var. <i>Youngii</i>	217	247
<i>Mimulus variegatus</i>	145	167
Miss Fanny Kemble, Tulip	169	183
<i>Nierembergia phoenicea</i>	121	144
<i>Oxalis Bowell</i>	97	115
<i>Oxalis crenata</i>	45	45
<i>Pinguicula vulgaris</i>	45	45
Prince of Orange, Polyanthus	193	216
Prince George Pansy	193	216
<i>Salvia pratensis</i>	97	116
<i>Schizanthus pinnatus</i> , var. <i>humilis</i>	25	14
Sky Blue and Yellow Pansy	217	248
<i>Sparaxis tricolor</i>	73	94
Thompson's Favourite, Pansy	193	216
<i>Utricularia intermedia</i>	49	69
<i>Veronica Becabung</i>	73	94
<i>Chamedrys</i>	121	144
<i>fruticulosa</i>	20	20
<i>hybrida</i>	69	69
<i>officinalis</i>	45	45
<i>saxatilis</i>	20	20

GENERAL INDEX.

	PAGE.
Acacia dealbata, Noticed	93
decipiens, var. <i>præmorsa</i> , Do.	106
graveolens, Do.	232
verniciiflua, Do.	179
Acrotiche ovalifolia, Do.	93
Adenophora verticillata, Reference to Plate	46
Agrostemma pyrenaica, Do.	154
A Jersey Gardener, On the Culture of Fuchsias	196
A Lover of Flowers, On Lagerstræmia Indica	30
Alpha, Query on Elichrysum proliferum	68
Alstræmeria aurantiaca, Noticed	181
Amaryllis vittata, On flowering	105
Amaryllis Jacobææ, On Flowering	241
Amelanchier florida, Noticed	107
Amicus, On a Dwarf Yellow Flowering Plant	210
Fido, On Nicotiana longiflora	227
Amygdalis Persica, alba, Noticed	92
Anagallis Monelli, Do.	62
An Amateur, Query on Fuchsias	115
or Sylvia Green, On Fuchsias	163
Remarks by	111
Gardener, On Bletia Tankervilleæ	145
Remarks by	167
On Cactus speciosissimus	141
An Ardent Amateur, On the Genus Lobelia	225
Andromeda hypnoides, Noticed	151
An Old F. H. S., Remarks by	166
Anthocersis viscosa	233
Appleby Mr. Thomas, On Triverania coccinea	177
Samuel, On Pelargoniums	88
April Floricultural Calendar	47
Arabis rosea, Noticed	107
Aristides, On the Culture of Gardenia florida	193
Aristolochia labiosa, Query on	141
Ashford Mr. F. F., On Lupinus mutabilis	29
On the Tuberose	86
Aster, Query by	211
adulterinus, Noticed	36
concinnus, Do.	204
cordifolius, Do.	136
eminens, Do.	180
sibiricus, Do.	138
Asters, On German and China	246
Astragalus procumbens, Do.	178
vesicarius, Do.	179
A Subscriber, Remarks by	69
On Autumn-flowering Annuals	185
August Floricultural Calendar	144
Auricula, Cultivation of the	157
On a new Lily	246
Auriculas, Query on	86
Collection of	187
Selection of	244
On an assortment of	245

	PAGE.
Autumn-flowering Annuals	185
Azalea indica, and varieties, Culture of	8
Query on the	160
Reply on the	213
ledifolia, var. <i>phanicea</i> , Noticed	92
pontica versicolor, Do.	11
Balsams, Cultivation of	54
Query on	27
Culture of	105
Banksia prostrata, Noticed	59
Barleria mitis, Do.	61
Bartonia albenscens, Do.	37
Barratt Mr. Wm., Observations on the Tipping of Incomparable Dahlia	243
Bath, Lady, Heart's-ease, Do.	205
Boebera incana, Do.	181
Beaufortia Dampieri, Do.	203
Begonia reniformis, Noticed	35
Bell Mr. John, On Lechenaultia formosum	68
Benthamia fragifera, Noticed	91
Berberis buxifolia, Do.	138
Billbergia zebrina, Noticed	61
Blechnum lanceola, Do.	91
Bletia acutipetala, Do.	12
gracilis	236
hyacinthina, Do.	182
Tankervillei, Culture of	145
B. M., Remarks by	112
Bouvardia triphylla, and B. Jacquinnii, Culture of	28
Bradley Mr. J. On Gloriosa superba	113
Brassavola nodosa, Noticed	59
Bristol Society	119
Butterwort, &c. Culture of	98
C. A., On suitable Flowers for Beds	114
Cactus speciosissimus, On Culture of	246
Cactus speciosissimus, Query on	141
var lateritus, Noticed	136
Remarks on Culture	245
Calandrinia speciosa, Do. Do.	136
arenaria, Do. Do.	155
Calceolaria Bicolor, Culture of	100
crenatiflora, Noticed	152
Do.	179
Herbertiana, var. <i>parviflora</i> , Do,	60
integrifolia, Do.	12
Menziana, Reference to Plate	167
purpurea, Noticed	204
var. <i>elegans</i> , Do.	137
rugosa, Do.	107
sessilis,	234
viscosissima, Do.	180
Wheeleri, Reference to Plate	94
Caledonian Society	47
Calliopsis bicolor, on Flowering	230
Calliprora lutea, Noticed	107
Callistachys retusa	236
Calochortis luteus, Do.	36
Calophanes oblongifolia, Do.	36
Reference to Plate	69
Camellia, Cultivation of the	49
Japonica, var. <i>imbricosa</i>	235
Cannon Stephen, Esq., Query on Gravelly Soil	242
Canna pallida, Noticed	152

INDEX.

251

	PAGE.
<i>Cargillia australis</i> , Do.	203
Carnations, Culture of	169—172
Query on	141—163
Drooping, Reply on	164
Notice of New ones	188
On the Properties, &c. of	187
List of	244
Carr Mr. R. C., On the <i>Ranunculus</i>	25
<i>Catananche cærulea</i> , Noticed	206
<i>Catasetum trifidum</i> , Do.	178
<i>Cattleya Forbesii</i> , Do.	179
<i>labiata</i> , Do.	157
C. C. C. C., On <i>Cactus speciosissimus</i>	184
<i>Celsia cretica</i> , Noticed	62
<i>Centranthus ruber</i> , Do.	94
<i>Cerantonis siliqua</i> , Query on	115
Answer on	245
<i>Cereus sesotus</i> , Noticed	15
<i>Ceropegia Wightii</i> , Do.	179
<i>Chetanthera serrata</i>	235
<i>Chorizema spartioides</i> , Noticed	156
<i>Chrysanthemum</i> , Cultivation of the	121
Culture and Arrangement of the	73
Query, On producing Seed	115
Answer to Query on	245
<i>Cineraria Tussilaginis</i> , Noticed	12
<i>Cirrhea viridipurpurea</i> , Do.	182
<i>Clarkia elegans</i> Do.	60
C. M. W., Remarks by	114
<i>Coburgia fulva</i> , Noticed	35
<i>Collinsia grandiflora</i> , Do.	16
<i>Collomia</i> Do.	16
<i>coccinea</i> , Do.	205
<i>lateritia</i> , Do.	181
Colours of Flowers, On the	183
<i>Combretum commosum</i> , Noticed	141
Committee of the Metropolitan Society	211
Conductor, On Pansies	199
Conductor, Answers by	244
Constant Reader, On <i>Gentianella</i>	96
On <i>Azaleas</i>	163
<i>Coreopsis Atkinsonia</i> , Noticed	16
<i>tinctoria</i> , On Flowering	230
<i>Corydalis bracteata</i> , Noticed	106
<i>longiflora</i> Do.	59
Cockscumb, Cultivation of the	55
<i>Crassula coccinea</i> and <i>C. vericolor</i> , Treatment of	128
Crimson creeping <i>Cereus</i> , Noticed	35
Crito, On the Metropolitan Society	165
On Pinks, &c.	188
<i>Crocus</i> , On <i>Ixias</i> , &c.	176
<i>lacteus</i> , Noticed	109
<i>Cryptophragmium venustum</i> , Do.	12
<i>Cyclamen repandum</i> Do.	138
<i>Cypripediums</i> , Query on	115
Cultivation of	217
<i>Cyrtanthus spiralis</i> , Noticed	139
Daffodil, On the Propagation of Dahlias	66
<i>Dahlia</i> , On Levick's Incomparable	47
Culture of the	3
By <i>Vertumnus</i>	32
Name, On its Derivation	65

	PAGE.
Dahlia, Query, On Mr. Levick's Incomparable	47
Cuttings, On Raising	96
New and Handsome	18
List of New	19
Notice of New	188
Propagation of	66
Daphne odora, Noticed	93
Dendrobium pulchellum, Do.	108
speciosum, Do.	179
Delta, Query, On Cypripediums	115
Denton J. Bailey, Query on Dutch Bulbs	242
Query on Gloxinias	242
Dianthus, On destroying Wood-lice	66
Dolichos lignosus, Noticed	110
Doncaster Society	71
Doryanthus excelsa Query on	141
Dracophyllum secundum, Noticed	179
Dryandra armata, Do	91
Duvaia dependens, Do	59
latifolia, Do	92
ovata, Do	36
Dutch Bulbs, Query on	242
Dwarf yellow flowering plant, On a	210
Earwigs, To destroy	66
Ebor, On flowering Amaryllis vittata	105
E. D. W. Query, respecting culture of Pansies	115
Edwards, Mr. Edward, On Tigridia pavonia	212
Elichrysium filiforme, Noticed	156
proliferum, Query on	68
Noticed	245
Emory, Mr. John, On Levick's Incomparable Dahlia	185
Engravings of Plants, List of	248
Enquirer, On Verbena melindres	21
Epacris campanulata, Noticed	93
alba, Do	106
oeræflora, Do	106
heteronema, Do	153
nivalis, Do	135
Epidendrum aloifolium, Query on	141
Harrisoniæ, Noticed	12
oncioidioides	233
Epiphytes of the Orchis tribe, Cultivation of	238
pygmæum, Do	59
Eranthemum elegans, Treatment of	222
Erica canthareiformis, Noticed	182
hispida, Do	236
pencillata, Do	62
quadrata, Do	62
sordida, Do	235
s, Cultivation of	172
Query on	115
Remarks on	245
Eryngium alpinum	238
Bourgati, Noticed	37
Erythrina Crista Galli, Culture of	6
poianthus, Noticed	90
velutina, Do	58
Essex Practical Gardener, On Camellias	49
Eucalyptus amygdalina, Noticed	153
Eugenia trinervia, Do	35
Ferguson, Mr. John	28
Ficus acuminata	233

INDEX.

253

PAGE.

F. L. S., Query on destroying Ants	241
F. H. S.	208
Florist Flowers, A Select List of	244
Flora, Query on Balsams	20
On derivation of the Dahlia name	65
On Thunbergia alata	228
Vernal	214
Floralegus, On Trevirania coccinea	223
Florists' flowers, where to obtain	95
Query on	47
Fritillaria minor, Noticed	232
Fuchsias, Culture of as Border plants	7
Query on	115
Reply on the Culture of	141—163
elegans, Reference to plate	216
gracilis, Culture of in the open border	151
globosa, Noticed	14
Reference to plate	69
macrostema, var. globosa	235
Gardenia florida, Culture of the	193
Gazania rigens, Noticed	156
Gelonium fasciculatum, Do.	59
Gentiana acaulis, Query on	96
Cultivation of	130
Geraniums, Cultivation of	88
German and China Asters, Query on Culture	211
Gesneria Douglassii, Noticed	109
Gifford, Mr. Wm.	143
Gilia capitata, On flowering	230
Gladiolus cardinalis, On Culture of	246
Gladiolus cardinalis, Query on	211
Watsonias, Noticed	152
Glenny, Mr George	214
Globularia vulgaris, Noticed	15
Gloriosa superba, Query on	20
Gloxinias, Query on Culture	242
Gloxinia speciosa, Noticed	11
Gnidia imberbis Do.	156
Gompholobium capitatum, Do.	14
tenue, Do.	180
venulosum, Do.	59
Gongora atropurpurea Do.	35
maculata, Do.	204
Goodyera repens	237
Greenhouse plants in the open border, List of	38
Treatment of in rooms	219
Gravelly Soil, Query on	241
Guernsey Lily, Query on the	68
Habranthus miniatus	235
Half-hardy annuals, List of	22
Hall, Mr. J. C., jun., On culture of Gentianella	130
Hannibal, on Florists' Rules	68
Hardy annuals, List of	43
Harrison, Mr. George, On the Balsam	56
On Crassula coccinea, &c.	128
Haworth, A. H. Esq., Arrangement of Chrysanthemums	74
Hemanthus puniceus, Noticed	152
Heart's-ease, Query on	115—167
Reference to plate	216
Culture of	199
Culture and list of	139
Heaths, Cultivation of	172

	PAGE.
Query on	115
Hedge, Wm.	230
Hedychium ellipticum, Noticed	14
Helleborus niger; var, vernalis, Do.	61
lividus Do.	93
Hermione aperticorona, Do.	93
tereticaulis, Do.	16
Hesperis speciosa, Reference to plate	20
tristis, Noticed	156
Heteropteris chrysophilla, Do. ..	91
H. G. S., On raising Ranunculuses	126
Hibiscus splendens	234
His Lordship, On propagating Dahlias	113
Hogg, Mr. Thomas, On Springfield Rival Dahlia.	165—189
's Supplement on Flowers, Reviewed	139
Hoya Pottii, Noticed	183
Human urine, Query on	46
Hunnemannia fumarifolia, Noticed	206
Hyacinths, Culture of	97—174—195
On raising Native	240
List of	244
Hyacinthus amethystinus, Noticed	156
Hydrangea, Query on	21
To change the colour of the flower	104
Hydrastis Canadensis, Noticed	59
Hypericum hyssopifolium, Do.	232
Hypoxis ramosa Do.	108
Incomparable, Levick's, Dahlia, Query on	185
Do.	47
Innovator, On the Pink	146
On the Hyacinth	195
's Reply to Mr. Revell on Pinks	243
Iris, on Chrysanthemums	121
Remarks by	166
Query on Carnations dying	141
Observations, Remarks, On	212
bicolor, Noticed	15
biglunio do.	61
Hungarico do.	183
Pseudacorus, Reference to plate	116
reticulata, Noticed	93
Ixia curta, do.	182
Ixias, Gladioluses, Antholyzas, Watsonias, and Lachenalias, On the	176
Culture of	141
Do. do. do. do. and Guernsey Lilies, Query on	186
Do. do. do. do. Culture of	131
Jackson, Mr. Wm. On the Polyanthus ..	92
Jasminum Sambac, Pleno	113
J. C. H. Remarks by	110
J. D. H. Remarks by	98
Jewitt, Mr. O. On Butterwort and Bog Plants	241
Jones Mr. Thomas, Query by	120
July, Floricultural Calendar for	96
June, Do.	92
Justicia callitricha, Noticed	62
speciosa, do.	222
elegans, Treatment of	211
J. W., Query on Gladiolus cardinalis	183
Kemble, Miss Fanny, Tulip, Reference to Plate	109
Kennedia longiracemosa, Noticed	30
Lagerstramea indica, Culture of	183
Leaves, Appearance of, magnified	

INDEX.

255

PAGE.

Lechenaultia formosum	....	....	....	....	245
Ledebouria hyacinthia, Noticed	....	....	....	....	35
Leeds, Mr. Edward, On Cypripediums	....	....	....	....	217
Leontice Altaica, Noticed	....	....	....	....	107
Leptotes bicolor	..	....	....	....	234
Levick Mr. James, Observations on the Tipping of Incomparable Dahlia	....	....	....	....	242
Levick's Incomparable Dahlia, On	....	....	....	....	243
Leucopogon Richei, Noticed	.....	....	....	....	134
Lily, on a New	....	....	....	....	246
Limnocharis Humboldtii, Noticed	....	....	....	....	133
Lindley Dr., on Culture of Epiphytes	....	....	....	....	238
Liquid Manure, Application of	....	....	....	....	153
Loasa alba, Noticed	....	....	....	....	94
nitida, do.	....	....	....	....	109
Placei, do.	....	....	....	....	12—137
Lobelia colorata, Noticed	....	....	....	....	16
mucronata, do.	.....	....	....	....	11
speciosa, Reference to Plate	....	....	....	....	20
Culture of the Genus	....	....	....	....	225
Tupa, Noticed	....	....	....	....	180
London Horticultural Society's Gardens, Exhibition at	....	....	....	....	166—189
Lotus corniculatus, Reference to Plate	....	....	....	....	144
Luff, Mr. Thomas, Query on Nerium splendens	....	....	....	....	211
Lupinus, Query on the bursting of Pinks	....	....	....	....	140
elegans, Noticed	.....	....	....	....	92
elegans, Reference to Plate	....	....	....	....	116
lepidus	....	....	....	....	236
mutabilis, Culture of	....	....	....	....	29
var Cruckshankii, Noticed	....	....	....	....	154
ornatus, do.	....	....	....	....	205
rivularis, do.	....	....	....	....	136
Lychnis fulgens, Query on	....	....	....	....	115
Pyrenaica, Noticed	....	....	....	....	202
sylvestris, Reference to Plate	....	....	....	....	167
Lysimachia Azorica, Noticed	....	....	....	....	203
Mackenzie, Mr. A. On the Carnation	....	....	....	....	172
Malpighia fucata, Noticed	....	....	....	....	109
Malva umbellata, do.	....	....	....	....	155
Mantell's Floriculture, Reviewed	....	....	....	....	34
Maranta bicolor, minor, Noticed	....	....	....	....	93
March, Floricultural Calendar for	....	....	....	....	23
Marnock, Mr. R. Remarks by	....	....	....	....	212
Marsden, Mr. James, On Hydrangea hortensis	....	....	....	....	104
Maxillaria punctata, Noticed	....	....	....	....	61
racemosa, do.	....	....	....	....	36
Warreana, do.	....	....	....	....	15
May, Mr. Wm, Remarks by	....	....	....	....	213
Floricultural Calendar for	....	....	....	....	71
Melaleuca Frazeri, Noticed	....	....	....	....	12
Melastoma malabathrica, do	....	....	....	....	108
Menzies, Mr. John, On the Cultivation of Azalea indica, &c.	....	....	....	....	8
On the Genus Nuttallia	....	....	....	....	125
Reply, On Azalea indica, &c.	....	....	....	....	212
Metropolitan Society	....	....	....	....	213
Mignonette, To flower during Winter and Spring	....	....	....	....	65
Miles, Mr. James, On the Ranunculus	....	....	....	....	81—124
Milla biflora, Noticed	....	....	....	....	13
Milk, Query on	....	....	....	....	46
Mimosa pudica, Culture of	....	....	....	....	31
Mimulus roseus, Noticed	....	....	....	....	108—205—236
variegatus, Reference to Plate	....	....	....	....	167
rivularis, var. Youngii, Do.	....	....	....	....	247

	PAGE.
Montague, Mr. W. on the Treatment of Fuchsias in pots	141
Moscharia pinnatifida, Noticed	14
M. S. Y. Query on <i>Tigridia pavonia</i>	162
Myrsine capitellata, Noticed	35
Narcissus angustifolius, Noticed	110
interjectus, do.	138
recurvus, do.	61
Neja gracilis, do.	37
Nerium splendens, On blooming	211
Nerium splendens, On Treatment of	246
New Lily, Remarks on	246
Newcastle Society	47
Nicotiana longiflora, Treatment of	227
Noticed	109
persica, do.	108
Nierembergia phœnicea, On flowering	230
Noticed	109
Nierembergia phœnicea, Noticed	156
Reference to Plate	144
Nottinghamshire Florist, On Dahlias	3
November, Floricultural Calendar for	216
Nuttalia, Culture of the Genus	125
October, Floricultural Calendar for	191
Oenothera biennis, var. <i>grandiflora</i> , Noticed	154
concinna, Do.	37
densiflora, Do.	108
tenella, var. <i>Tenuifolia</i> , Do.	107
Reference to Plate	144
Oncidium Harrisonia, Noticed	36—62
pulchella, Do.	237
Opuntia aurantica, Do.	155
Orobis auranticus, Do.	137
aureus, Do.	156
Oxalis Bowiei, Do.	92
Reference to Plate	115
brasiliensis, Noticed	182
crenata, Reference to Plate	45
divergens	234
Oxide of Manganese, Query on	211
Oxide of Manganese, Observations on	246
Oxley Mr. John, On the Culture of the Coekscomb	55
Oxylobium ellipticum, Noticed	134
Pultenea, Do.	151
Pansies, Query on	115—167
Reference to Plate	216—248
Culture of	199
Culture and List of	139
On Properties of	247
Passiflora edulis, Treatment of	27
phœnicea, Noticed	154
Paul Pry, On raising Double Stocks	89
Query on Auriculas	96
Pelargoniums, Cultivation of	88
Periploca græca, Noticed	138
Peters Mr. A., Query on Heaths (<i>Ericas</i>)	115
Petrophila trifida, Noticed	15
Petunia violacea	234
Philanthos	172
Phlox Wheeleriana, Noticed	37
Pholidota imbricata, Do.	108
Pimelea arenaria, Do.	202
hispidia, Do.	60—182

INDEX.

257

	PAGE.
<i>Pimelea longiflora</i> , Noticed	233
<i>sylvestris</i> , Do.	92—182—231
<i>Pinguicula vulgaris</i> , Reference to Plate	45
Pinks, Carnations, Dahlias, &c., Remarks on	188
Cultivation of	101
On Growing	146
Remarks on Innovator's, Article on	212
On Piping	196
List of	244
<i>Piptanthus nepalensis</i> , Noticed	181
<i>Plagianthus divaricatus</i> , Do.	203
Plant Mr. John, On Plants in Rooms	219
On <i>Eranthemum elegans</i>	229
Plants in Flower in January	24
suitable for Sharp Gravel, Query respecting	163
Answer to do.	246
<i>Platycodon grandiflorum</i> , Noticed	181
<i>Platylobium Murrayanum</i> , Noticed	153
<i>obtusangulum</i> , Do.	153
<i>Pleurothallis prolifera</i> , Do.	153
<i>Pogostemon plectranthoides</i> , Do.	91
<i>Polianthes tuberosæ</i> , History of	208
<i>Polyanthus</i> , Cultivation of the	131
Prince of Orange, Reference to Plate	216
List of	244
<i>Polygala thesioides</i>	235
<i>Pomaderris andromedæfolia</i> , Noticed	13
<i>betulina</i> , Do.	12
<i>Potentilla glandulosa</i> , Do.	92
Price Mr. J., Query, On Guernsey Lily	69—185
<i>Priestleya villosa</i> , Noticed	12
<i>Primula amaneæ</i> , Do.	135
<i>sineensis</i> , <i>alba</i> Do.	93
Prince of Orange <i>Polyanthus</i> , Reference to Plate	216
<i>Priscilla</i>	20
Prize Flowers exhibited in 1832	63
<i>Prockia crucis</i> , Noticed	108
<i>Psilotum triquetrum</i> , Do.	62
<i>Psychotria daphnoides</i> , Do.	58
<i>Pteris pedata</i> , Do.	167
<i>Pultenæ rosemarinifolia</i> , Do.	92
<i>subumbellata</i> , Do.	135
Queen of Sheba, Carnation, Noticed	188
Ramsden, Lady, Dahlia, Noticed	188
<i>Ranunculuses</i> , On the Failure of	148
On Raising from Seed	124—126
Culture of	25—81
On the Failure of	143
On Raising from Seed	16
Catalogue of	17
Remarks, by An Amateur, On Camellias, &c.	111
B. M.	112
Remarks by J. D. H.	110
J. C. H.	113
Snowdrop	141
Veritas	143
Mr. Wm. Gifford	143
Mr. T. K. Short	111
on the Statement of An Old F. H. S.	211
No. I.	66
No. I. and No. II.	69
Reply to Queries, by the Conductor	244

	PAGE.
Request of Snowdrop	184
Revell Mr. John, On Liquid Manure	53
On the Pink	101
Reply on Carnations dying	164
Remarks on growing Pinks	212
Rhipsalis mesembryanthemoides, Noticed	62
Rhododendron campanulatum, Do.	138
catrawbiense, Do.	110
Risby Mr. T. J., Query about Florist Flowers	47
Rock Mr. J., On the Humble Plant	31
Rosa, Query on forcing Roses	163
Banksiæ lutea, Noticed	157
Rose, Culture of the	206
Roses, Query on forcing	163
R. R., Query on Plants for Gravelly Soil	163
Rubus roridus, Noticed	155
Rudbeckia pinnata, Do.	110
Ruellia oblongifolia, Do.	15
Rules of a Florists' Society, Query respecting ..	62
Ryan Mr., On Native Hyacinths	240
Saccolabium papillosum, Noticed	13
S. A. P., Query on Tulips, &c.	211
S. C. A., Query on Saw Dust	241
Saint Patrick, On Erythrina Crista Galli	6
Query on Solandra grandiflora	21
On the Culture of Balsams	57
Salpiglossis linearis, Noticed	152
integrifolia, Do.	236
Salvia Africanus, Culture of	9
anjustifolia, Noticed	13
Cardinalis, On flowering	230
pratensis, Reference to Plate	116
Santalum albarum, Noticed	91
Sarracenia flava do.	157
Sauroglossum elatum, do.	204
Saxifraga Aizoon, do.	182
Saw Dust, Query on	241
Schizanthus pinnatus; var <i>humilis</i> , Noticed	14—137
retusus, do.	154
Scilla villosa do.	12
Scutellaria alpina do.	62
Sempervivum villosum do.	13
Senecio Tussilaginus do.	13
September, Floricultural Calendar for	168
Sharman, Mr. John	27
Short, Mr. T. K. On Salvia Africanus	9
On Calceolaria bicolor	100
On the Culture of Hyacinths	174
On the Culture of Ixias	186
Sisyrinchium iridifolium	236
S. J. On Fuchsias as Border Plants	7
Snowdrop, Answer on Culture of Tigridia pavonia	242
Suggestions for Conductor, &c.	46
Remarks on No. 1, of the Cabinet	68
Reply to Mr. Risby, on Florist Flowers	95
On the Culture of Balsams	105
Queries on Chrysanthemums	115
On growing Ranunculuses in pots	143
On piping Pinks	196
Soap-suds, Query on	46
Soils, How to detect the various kinds, Query on	114
Solandra grandiflora, Query on	21

INDEX.

259

	PAGE.
<i>Solandra grandiflora</i> , Cultivation of	83
<i>guttata</i> , Noticed	13
<i>Solanum crispum</i> , Do.	157
<i>ligustrum</i> , Do.	182
<i>runcinatum</i> , Do.	16
<i>Sollya heterophylla</i> , Do.	235
<i>Sparaxis tricolor</i> , Reference to Plate	94
<i>Spirea bella</i> , Noticed ..	138
<i>grandiflora</i> , Do.	237
Springfield Rival Dahlia, Remark on	165-189
Reply relative to	214
<i>Stachys albicaulis</i> , Noticed	14
<i>Stanhopea insignis</i> , Do.	237
<i>Stenactis speciosa</i> , Do.	60
Stent Mr. William, On raising Double Stocks ..	103
Stocks, Query on	21
On raising Double-flowering from Seed	89-123
<i>Streptocarpus Rhexii</i> , as a Border Plant.	56
<i>Sylvia Green</i>	164
<i>Symplocarpus foetidus</i> , Noticed	35
<i>Syringa Josekæa</i> , Do.	232
Tallies for Roses	94
Tate Mr. Richard	21
T. B., On destroying Wood-lice	65
Tender Annuals, List of	21
Tender and Hardy Annuals, List of	42
<i>Tetragonolobus siliquosus</i> , Noticed	156
Tew Mr. Joseph, Query on blooming Plants	141
T. G. S., On the Carnation	169
<i>Thysanotus junceus</i>	237
Thornton Mr R., Query on St. John's Bread	111
<i>Thunbergia alata</i> , Culture of	228
<i>fragrans</i> , Noticed	61
Tiro Florilegens, Query on German Asters, &c.	211
<i>Tillandsia setaceous</i> , Noticed	203
<i>Tigridia pavonia</i> , Culture of	212
Query on	162
On Culture of	242
<i>Trifolium uniflorum</i> , Noticed	15-137
<i>Tigridia pavonia</i> , Answer on Culture	242
<i>Trillium erectum</i> , var. <i>viridiflorum</i> , Noticed	134
<i>Triverania coccineum</i> , Culture of	177-223
<i>Tropæolum Majus</i> , var. <i>atrosanguineum</i> , Noticed	154-238
<i>Tuberosa</i> , Culture of	80
History of	208
Tulip, Query by, On the Carnation	163
Tulip Beds, A Moveable Frame for	85
Tulip, Culture of the	149
<i>Tulipa</i> , Query, On Culture of	90
Tulips, Query on	95
Tulips, Query on	211
Tulips, On taking up the Bulbs of	246
List of	245
Tyso Rev. Joseph, On Tallies for Dahlias, &c.	95
On Failure of Ranunculuses	148
Urine, Remarks on, by Conductor	244
Query on, by Snowdrop	46
<i>Utricularia intermedia</i> , Reference to Plate	69
<i>Vaccinium arboreum</i> , Noticed	15
<i>Verbena alata</i> , Noticed	16
Melindres, Query on	20
On Propagating the	67

	PAGE.
<i>Verbena radicans</i> , Noticed	206
<i>venosa</i> , Do.	181
Veritas, Remarks by	142
Veronica Becabunga, Reference to Plate	94
<i>Chamedrys</i> , do.	144
<i>fruticulosa</i> , do.	20
<i>hybrida</i> , do.	69
<i>officinalis</i> , do.	45
<i>saxitilis</i> , do.	20
Vertumnus, On the Culture of Dahlias	32
On propagating Dahlias	96
Voiceless Preacher, The	214
W. B., Query on Double-flowering Stocks	21
W. B. P., On a Frame for Tulip Beds	85
On the Culture of Tulips	149
Westringia longifolia, Noticed	15
Wharncliffe Lady, Pink, Reference to Plate	167
Whiddon Mr William	67
Wistaria consequana, Query on	163
Answer on	246
W. K., On Solandra grandiflora	83
Wonder of the World Carnation, Noticed	188
Wood-lice, To destroy, in frames	65
Wrightia pubescens, Noticed	93
W. W. J., Query respecting Soils	114
Xerophyllum setifolium, Noticed	180
X. Y. Z., Query on Wistaria Consequana	163
Zinnia tenuiflora, Noticed	37
Zygopetalum stenochilum	98

END OF VOL. I.

THE
FLORICULTURAL
CABINET,
AND
FLORIST'S MAGAZINE.

JANUARY TO DECEMBER, 1834.
VOLUME II.



CONDUCTED BY JOSEPH HARRISON,

GARDENER TO THE

RIGHT HON. LORD WHARNCLIFFE,

WORTLEY HALL,

LONDON:

WHITTAKER & CO., AVE-MARIA-LANE;
AND G. RIDGE, MERCURY OFFICE, SHEFFIELD.

PREFACE.

IN presenting our readers with the **SECOND VOLUME** of the **FLORICULTURAL CABINET**, which is completed with the present Number, we feel that a heavy debt of thanks is due from us, and which we unfeignedly offer to our numerous subscribers and contributors ; for we believe no other periodical work on Floriculture or Horticulture has ever reached so extensive a circulation, or enjoyed so large a portion of public patronage as our own.

At the conclusion of our First Volume, we pledged ourselves that, with the valuable assistance of our numerous contributors, we would endeavour to render this our Second Volume still more worthy of the support of our friends ; and we think the increasing demand which our work experiences is sufficient evidence that our pledge has been fulfilled, and that our labours are approved ; and we have no hesitation in affirming, that such a body of Floricultural intelligence as is contained in the **CABINET** will not be found in any other existing publication.

For a large portion of the valuable and important information which our pages contain, we are indebted to our numerous kind and liberal contributors. We are grateful for their assistance, and respectfully solicit their continued aid ; feeling quite confident that, with such support, the succeeding Volumes of the **CABINET** will be presented to our readers equal, and in some respects superior, to those already published, and still more deserving of their patronage.

Wortley, Nov. 20th, 1834.





LEVICK'S BEAUTY OF SHEFFIELD.

T Gray Del

J & J. Parkin Sc

THE
FLORICULTURAL CABINET,

JANUARY 1st, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On Forcing the Rose, more particularly the Rose du Roi, or King of the Roses.* By Mr. WILLIAM WOOD, Nurseryman and Florist, Woodlands Nursery, Maresfield, Sussex.

On a perusal of the *Floricultural Cabinet*, I observe one of its correspondents requests information on the best method of forcing Roses, (Vol. I., p. 163,) and other persons I see wish to know the best sort of Rose for the purpose. I feel much pleasure in not only having it in my power to communicate a method of culture which I am certain will amply repay for the attention given it, but also to add my first mite of contribution to the deservedly popular *Florist's Magazine*.

Before I detail my mode of culture, I beg to remark that the Rose du Roi, or King of the Roses, is perhaps the best Rose known for the purpose of forcing; in fact, out of twelve hundred kinds which I grow, I have not one more deserving of general cultivation, nor do I believe a better Rose exists in any other collection. It continues to bloom in the open border for eight successive months; the flowers are of a fine bright deep red, very showy, with a fine dark green foliage, closely attached to the flower, two of which will form a beautiful bouquet; the flowers are also

very fragrant. With attention a succession of flowers may be obtained, so as to have them all the year. This rose ought to have a situation in every flower-garden.

TO HAVE THEM IN BLOOM AT CHRISTMAS.

Culture.—About the first week in November, I plant them in pots of the 24 size; the soil I use is a good strong Melon mould. After potting, I give them a good watering, in order to settle the soil around the fibrous roots. Having a deep frame provided for the purpose, a quantity of old tan or rotten leaves is thrown into it; the pots are then plunged therein, taking care to plunge them so deep that the rims are two inches at least below the surface. The frame is formed with sides like lattice-work; it is constructed in this manner for the purpose of admitting heat to be applied. No bottom heat is required.

After having plunged the pots, I keep the frame-lights off for ten or twelve days, and during that time, if no rain falls, I give them two or three good waterings. At the end of that time, I cut the shoots back to two buds. In performing this operation, care is taken to hold the plant firm, so that the roots are not disturbed by it. The sashes are now put on, and covered with mats; a good lining of hot stable-dung is also placed round the frame. I allow the mats to remain on ten or twelve days. By this time the plants will have pushed shoots two inches long. I then take the mats off in the day-time, and raise the lights about two inches, for the admission of air; this is increased as the strength and growth of the plants advance, observing to give the most air when the weather is fine and mild. In five or six weeks from the time of applying the lining of dung, I have the plants in full and vigorous bloom. Water is applied when found necessary, using it in a tepid state.

WILLIAM WOOD.

Woodlands Nursery, Nov. 17th, 1833.

ARTICLE II.—*On Forcing Roses.* By Mr. J. R. WILLIS, jun., at Messrs. WHITLEY, BRAMES, & MILNES's, Fulham Nursery, near London.

I am much pleased to observe that the culture of that universally esteemed genus of plants, in all its fragrant and brilliant

varieties—the Rose, begins to occupy a place in the pages of the *Floricultural Cabinet*. From the vast extent of species and varieties which the genus includes, the splendour and abundance of the flowers, and their exquisitely refreshing fragrance, we may very certainly calculate that remarks upon their culture, &c. will occasionally be presented for insertion in the *Cabinet*. To add my mite on the subject, I herewith transmit some brief particulars on forcing the Rose, elicited by the query of a correspondent which is given at page 163, (Vol. I.)

In the first place, collect an equal portion of good substantial loamy soil, well-rotted leaves, and very rotten dung from an old cucumber-bed, mixing them well together; having done this, procure some pots from nine to twelve inches in diameter, placing three plants in each pot. The plants that were forced in January and February I report about the latter end of August. I then let them remain in the open air till December, when I remove them into the hothouse. Before I take them to that situation, I cut back the young shoots to two or three eyes from the old stem. After being thus pruned, for the first three weeks I keep the house to from 60 to 70 degrees of heat, and then increase it to from 80 to 90 degrees. The plants have plenty of drainage given in the pots at the time of potting, so that water will pass off freely; thus a proportionate supply of fresh water being required, the plants are benefited by it. Whilst in high temperature, it is advantageous to the plants occasionally to syringe them over the tops.

I would advise not to force very rapidly at the commencement, otherwise the buds will push weakly shoots, which will produce few, if any, flowers, and those even very weakly. Begin with the low temperature, and gradually increase to the degrees stated in the period above described. If this, with the other particulars, be attended to by the correspondent who, in page 163, asks for information, he will be amply repaid with a good bloom.

Oct. 25th, 1833.

J. R. WILLIS, Jun.

ARTICLE III.—*On Striking Pelargoniums*. By SNOW-DROP.

Cuttings of Pelargoniums and Geraniums succeed well under very simple treatment, and, although complicated means are gene-

rally recommended, yet I can vouch for the following method being equally successful, and the trouble is certainly next to nothing. In June take off cuttings at the third or fourth joint, cut the stem across through, or immediately under, the joint, and take off the lower leaves close to the stem. Choose a situation in the open border, or under a wall, either quite or partially shady, and prick out the cuttings three or four inches apart; water as occasion may require. When the plants appear to be rooted, pot them in 60's in compost well incorporated of equal parts loam and very rotten dung, which has become quite mould, and about a sixth part of silver or pit sand. If a frame be handy, the plants will be benefited by being placed therein for a few days, or until they strike fresh root.

SNOWDROP.

ARTICLE IV.—*On the Failure of Ranunculuses.* By KATE B.

In the September Number of the *Cabinet*, Vol I. p. 148, an article appears on the failure of Ranunculuses during the last year, by the Rev. JOSEPH TYSO. In perusing it over, and comparing his remarks with my practical observations and experience, I cannot avoid stating, that although Mr. Tyso's paper contains some excellent remarks, yet some parts of it are calculated to mislead the readers of the *Cabinet* into an erroneous method of cultivating this beautiful flower, and consequently to meet with disappointment. To prevent this, is the object of my forwarding the present remarks for insertion in the Magazine.

After stating the causes of failure, Mr. Tyso says, that "the only means of preventing a like failure in similar seasons will be, copious waterings and a cool shade." Now upon this I beg to observe, that there is no more effectual way of preventing the blooming of any plant whatever, than placing it in a cool shade. Every florist knows that the sun, the bright sun, shining hot upon the bed throughout the day, is indispensable to a profuse bloom in any description of plant. I therefore recommend every cultivator of the *Ranunculus* to make his bed in that part of his garden where it will have *no shade whatever*.

Mr. Tyso is correct in stating that the failure was very general last season; but such failure should be attributed to neglect alone.

I had a most abundant bloom, and my bed was quite exposed to the hot glowing sun from morn till night. Should it be inferred that my plants must have been burnt up, I reply not at all. I did not *neglect* them—that is to say, I made it a practice, every morning on rising, to give the bed a very plentiful supply of water between the rows, and repeated the same after the sun had set. I never missed a single day; so that, notwithstanding the long drought, the soil was like a swamp, or marsh, and such is just what it ought to be. I must not omit to mention that I laid cowdung between the rows, by which little moisture was lost by evaporation; and from gratifying experience, I can assure the readers of the *Cabinet*, that an abundant and vigorous bloom can far more easily be secured in a hot dry season, than in a cloudy wet one; as there is no difficulty in supplying moisture, but we cannot conveniently find a substitute for the glorious orb of day. I regard soil as quite a secondary consideration.

KATE B.

Wandsworth-Road, Oct. 4th, 1833.

ARTICLE V.—*A few Remarks on the different Varieties of Magnolia.* By MAGNOLIACEÆ.

Having seen the different varieties of *Magnolia* growing with great splendour in their native climes, and also in some parts of England, induces me to send a few remarks upon the different species, in hopes the same may be a stimulus to their introduction more generally into our pleasure-grounds, where I am confident they would thrive exceedingly well, if properly planted and secured.

The *Magnolia grandiflora*, Big Laurel and Large *Magnolia* of America, and *Laurier tulipier* of the French,—is first seen in North Carolina, near the river Nuse, in the latitude of $35^{\circ} 31'$; and proceeding from this point, it is found in the maritime parts of the Southern States, and of the Floridas, and as far up the Mississippi as Natchez, 300 miles above New Orleans, which embraces an extent of 2,000 miles. According to MICHAUD, the *Magnolia grandiflora* claims a place among the largest trees of the United States, as it sometimes reaches ninety feet in height, and three in diameter; but its ordinary stature is from sixty to seventy feet. Its trunk is commonly straight, and its summit nearly in

the shape of a regular pyramid. Those who have seen this tree in its native soil, blooming with its large white fragrant flowers disposed amidst the rich foliage of the tree, agree in considering it one of the most beautiful productions of the vegetable kingdom. In Carolina it blossoms in May, and the seeds are ripe in October. In its native climate it grows only in cool shady places, where the soil is composed of brown mould, and is loose, deep, and fertile. The most northern point in which this tree passes the winter in the open air, is about Nantes, in lat. $47^{\circ} 13'$; but it begins to bear ripe fruit about Grenoble, in lat. 45° . In England the *Magnolia grandiflora* is more injured by being planted in an ungenial soil than from the severity of the climate; the fact is, the soil should be that above described, but not an insulated portion, as is mostly the case in practice, by digging a hole and supplying it to the plant merely to that extent, whereas it should be general over a large extent of surface, so as to affect the atmosphere by its peculiar exhalations, thus acting on the leaves as well as on the roots. The *Magnolia grandiflora* was introduced into England about 1731.

Magnolia cordata, Heart-leaved Cucumber Tree, in its native soil of the banks of the river Savannah, in Upper Georgia, attains to forty and fifty feet in height, and from twelve to fifteen inches in diameter. The leaves are from five to six inches in length, and from three to five in width. The flowers, which appear in April, are yellow, and are nearly four inches in diameter. The tree is very hardy and ornamental. Introduced into England in 1801.

Magnolia tripetala, Umbrella Tree, is found in soils deep and fertile in the northern parts of New York, and is common on some of the islands of the river Susquehanna. Near the great swamps of South Carolina and Georgia, it is almost invariably accompanied by the *Magnolia grandiflora* and Swamp Chesnut Oak. It is of humbler growth than the *M. grandiflora*, seldom attaining to thirty-five feet in height, with a diameter of six inches. The leaves are eighteen or twenty inches long, and seven or eight broad. The flowers are white, and seven or eight inches in diameter. The fruit is four or five inches long, and two inches in diameter. The tree is highly ornamental, and very hardy. Introduced into England in 1752.

Magnolia glauca, *Glaucous-leaved*.—This tree is found common in Lower Jersey, but is also found in latitude 45° 50', near Cape Anne, in Massachussets, North America. It generally attains to 30 feet in height. At New York it yields fruit at the height of six feet. The flowers are fragrant, and the bark of the roots has an aromatic odour and a bitter taste. Introduced into England in 1688.

Magnolia acuminata, is common in all parts of the United States of America, where it is generally known under the name of the Cucumber Tree. Its stature is similar to the *Magnolia grandiflora*, rising to seventy feet, and sometimes even as high as ninety feet. It is found as far north as the 43rd degree of north latitude. The trunk is perfectly straight, of an uniform size, and often destitute of branches for two-thirds of its length; the summit ample, and regular shaped. The flowers are from five to six inches in diameter, of a bluish white, having a feeble odour; but as they are so large, and are numerous, they have a fine effect in the midst of the upper foliage. In England this tree is perfectly hardy, and attains to a considerable size. Introduced into England in 1736.

Magnolia auriculata, Long-leaved Cucumber Tree, is equally remarkable with the *Magnolia tripetalæ*, for the beauty of its foliage and the size of its flowers, which are also of an agreeable odour. It is found only in a small tract far retired in the country, at the distance of 300 miles from the sea, on a part of the Alleghany mountains. In its native soil it attains to fifty feet, and a diameter of fifteen inches. The leaves are of a light green colour, of a fine texture, eight or nine inches long, and from four to six inches broad. The flowers are white, and from three to four inches diameter. It is a hardy tree, and very ornamental for pleasure-grounds. Introduced into England in 1786.

Magnolia macrophylla, Large-leaved Cucumber Tree, is more remarkable for the superior size of its leaves and flowers than any other species of this genus. It resembles most the *Magnolia tripetalæ* in its general habit of growth, and is generally found growing in company with it. The leaves are sometimes thirty-five inches long, and nine or ten inches broad. The flowers are white, fragrant, and larger than those of any other species of *Magnolia*, being sometimes eight or nine inches in diameter. The buds are compressed, instead of being rounded at the end, as

in the *Magnolia tripetalæ*, and they are covered with a soft, silvery down; this circumstance affords a ready distinction between these species at that season when the flowers and leaves are absent. The tree is highly ornamental. In its native soil it grows to the height of forty feet. Introduced into England in 1800.

The other species of *Magnolia* in the gardens of England come at present, or as far as experience of their habits in this climate indicates, exclusively under the head of dwarf ornamental plants or shrubs, and for the present they are omitted in this enumeration, but I will ere long send you a few remarks upon them; also, at the same time, I will give you my opinion of the method which should be adopted in planting the seven varieties already enumerated.

MAGNOLLACEÆ.

ARTICLE VI.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

I have very frequently felt the want of a list of Roses, which should contain a description of the colour of the flowers, &c. This deficiency, I am pleased to say, I had most agreeably made up a few days since, by having a catalogue put into my hands of a thousand sorts cultivated by Mr. WOOD, Nurseryman, Woodlands, near Maresfield, Sussex, and of Paris. The description in the catalogue pleased me so much, and afforded me information at once so useful and interesting, that I resolved on arranging the kinds alphabetically, which is not done in the catalogue, and forwarding the list for insertion in the *Cabinet*, believing it would be found of use to a great portion of its readers.

GARDEN VARIETIES.

NAMES.	DESCRIPTION.
1 Abergé.....	Light blush.
2 Abundant	Blue purple.
3 Achates	Small purple.
4 Achille	Beautiful globe, bright red.
5 ———	New, bright pink.
6 Actavit	Fine cherry red.
7 Adelaide d'Orléans	Large bright pink.
8 Adèle Heir	Fine close deep crimson.
9 A Feuille de Letus	Bright pink.
10 A Fleur renoncule	Small drooping.
11 African Black.....	Deep crimson.
12 Agathe	Fine deep blush.

NAMES.	DESCRIPTION.
13 Agathe carnée.....	Small pink blush.
14 — des Dames	Bright shaded crimson.
15 — de Francfort	Fine light crimson.
16 — du Portugal	Scarlet and purple mottled.
17 Aimable Ami	Very pretty light pink.
18 — beaute	Pale blush.
19 — Noir	Deep dark velvet.
20 — Princesse.....	Large deep pink.
21 — violet	Good violet.
22 A la creme	Cream colour.
23 A la mode	New, red.
24 — de Paris	Very brilliant red.
25 — nouvelle.....	Fine purple.
26 A l'Angloise	Pinkish red, very double.
27 Alaturzi nouveau	Light and dark purple.
28 Alexandrine	Fine spotted purple.
29 Alexandrian	Beautiful fine red, very double.
30 Alphonse.....	Fine double, bright small red.
31 Altum	Light red purple.
32 Amalade	Delicate and changing pink.
33 Ambroise de Lamela	Red.
34 Amena	Variegated red.
35 Amine	Light purple.
36 Amora	New, crimson.
37 Anna Marie.....	Blush.
38 Anemoniflora	Small pink blush, pretty.
39 Augustine	Large double red.
40 Aninon	Pale blush.
41 Antrobus	Light red and crimson.
42 Archevê que de l'Amberge.....	Purple and scarlet, dark.
43 Arcie	Scarlet.
44 — Superbe.....	Beautiful large red.
45 Aristide	Light pinkish red.
46 Assyria.....	Small fine pomponne blush.
47 Athalante	Pale blush.
48 Athenien	Beautiful pale large blush.
49 Atrosanguinea	New, very dark.
50 Aurelius	Fine bright crimson.
51 — prudens	Red.
52 Aurore	Large pale blush.
53 — superbe	Large mottled red.
54 Bacchus	Fine light red.
55 Barbanegre	Changeable scarlet mottled.
56 Baron de Stael	Close light double blush.
57 Beau bicolor	Bright crimson and light blush.
58 — bijou	Fine bright red.
59 — rouge	Fine light crimson, late, clusters.
60 Beaute	Large splendid rosy scarlet.
61 — Hortensia.....	Elegant flesh colour.
62 — Surprenante	Ruby.
63 Beauty of Flora	Beautiful large lilac.
64 Belle Angustids	Pretty blush.
65 — Armoine	Fine purple.
66 — arsene	Light and dark purple.
67 — Antolnette	Pale blush.
68 — Bichoune	Fine dark purple.
69 — Bleu	Light blue purple.
70 — Brilliante	Beautiful blush, very double.
71 — Camille	Deep pink.
72 — Catelle	Large red.

NAMES.	DESCRIPTION.
73 Belle couronne	Semi-double purple.
74 — cramoise	Exquisitely fine bright crimson.
75 — d'Auctroi	Semi-double blush.
76 — Dauphine	Double crimson.
77 — d'Antiene ..	New, fine small light pink.
78 — de Beauce.....	Fine double.
79 —	New, fine crimson.
80 — Beauvais	Cherry red.
81 — Dieppe	Beautiful blush.
82 — Fantaisie	Fine deep pink.
83 — Hesse.....	Deep blush.
84 — Kennedia	Curly, fine red.
85 — la borde	Fine pink mottled white.
86 — Chine	Fine pale red.
87 — d'Olymphe	Large double rose colour.
88 — de Passi.....	Fine double bright red.
89 — Province	Pale red.
90 — Trian	Semi-double deep scarlet.
91 — Trianon	Pretty small pink.
92 — Tunis	Rich crimson.
93 — Tyre	Pinkish crimson.
94 — Elize	Fine double bright deep pink.
95 — Escarmoise	Singular semi-double pink purple.
96 — et Bienfaite	Fine large semi-double purple in clusters.
97 — Fille	Beautiful large blush.
98 — gracieuse	Light changeable purple.
99 — Helene	Cherry red.
100 — Hermoine.....	Large bright red and pink.
101 — Leloise	Very double red.
102 — Liloise	Fine light blue.
103 — Nanette nouveau	Large fine bright crimson, changing purple.
104 — Negre	Dark crimson, nearly black.
105 — noire.....	Nearly black.
106 — Porcie	Purple.
107 Bellerophon	Purplish light crimson.
108 Belle Rosine	Semi-double red.
109 — rouge	Bright scarlet.
110 — sans flatterie.....	Variegated pale blush.
111 — victoire.....	Fine double purple.
112 Bicolor varie	Close scarlet and purple.
113 Bijou.....	Fine small red.
114 Bijoux des Amateurs	Red.
115 Black Brunswick	Nearly black.
116 — Damask	Very dark velvet.
117 — Mottled	Very fine.
118 Blancard	Fine deep red.
119 Blanc changeable	Changeable white.
120 — de Belgie	Good white in clusters.
121 Blandine	Fine large deep pink.
122 Blas de Santillane	Large rich velvety crimson.
123 Bleu atheral	Pretty curious blue.
124 Boila.....	Light rosy purple.
125 — de la Faye	Gay scarlet globe.
126 Bolina	Fine large bright pink.

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

REVIEWS.

A Treatise on the Artificial Growth of Cucumbers and Melons, conjointly with that of Asparagus, Mushrooms, Rhubarb, &c.

Comprehending Observations on the Methods now in use for the Growth of Cucumbers, with a full Explanation of an Improved Mode of Culture, by which, with a much less quantity of the fermenting substance, and a tithe of the care and attention which is generally bestowed upon them, not only is success rendered certain, even in the most adverse season, and Fruit of the finest appearance produced, but Asparagus, Mushrooms, Rhubarb, &c. are at the same time produced, of excellent quality, and with the greatest possible celerity; to which are added, brief observations on the Growth of Early Potatoes. With three plans of a Hot-bed.

By Mr. JOHN SMITH, nearly 20 years Gardener to DYKES ALEXANDER, Esq., Ipswich.—12mo. pp. 58. Price 7s. 6d. bds.

We noticed this publication, and made an extract from it, in our December Number of the *Gardener's and Forester's Record*. Our opinion is, that on the subjects treated upon, the remarks and instructions are plain, sensible, and excellent. If the directions be followed, there will be no disappointment.

The Irish Farmer's and Gardener's Magazine, and Register of Rural Affairs. Conducted by MARTIN DOYLE, Author of "Hints to small Farmers," "Practical Gardening," &c., and EDMUND MURPHY, late Acting Secretary to the Horticultural and Arboricultural Societies for Ireland. No. I., November, pp. 56. Price 1s. (To be continued Monthly.)—Curry and Co., Dublin; Simpkin and Marshall, London.

That Horticulture has not made greater progress in Ireland, is not for want of a suitable soil or climate, such advantages being ample for the successful operations of gardening in all its branches; yet under the most favourable circumstances, generally speaking, little has been attempted beyond the cultivation of ordinary fruits and vegetables. We therefore hail with pleasure the appearance of this publication, and from its being under the management of such eminently practical individuals, the result of their efforts, we are per-

suaded, will fully justify us in asserting that they will prove essentially useful, and give a rapid taste for Horticulture, Floriculture, Arboriculture, &c. in their more refined operations in that country. What we know of Farming operations is from observation, consequently theoretical; but in the Number before us there are some useful hints, and from being connected with Gardening in the Magazine, perhaps one may assist to make known more extensively the other, and be a greater advantage to Ireland than if published separately.

The contents consist of four papers on Horticulture, two on Arboriculture, four on Agriculture, with Miscellaneous Remarks, Accounts of Horticultural Society's Meetings, &c. &c.

Hortus Woburnensis: A descriptive Catalogue of upwards of Six Thousand Species and Varieties of Ornamental Plants, cultivated at Woburn Abbey. With numerous illustrative Plans for the Erection of Forcing-Houses, Green-Houses, &c.; and an Account of their Management throughout the Year. By JAMES FORBES, A.L.S., C.M.H.S., &c., Gardener to his Grace the DUKE of BEDFORD, K.G. 8vo, pp. 440. 26 Lithographic Prints. London, 1833. Medium paper, 21s.; royal paper, with proof prints, £2 2s.; royal paper, with proof prints, coloured, £2 12s. 6d.

In looking through this publication we have been much pleased, and we think the object with which the Author sets out, as stated in the prefatory observations, is most fully and satisfactorily accomplished. Mr. FORBES says, "The first part of the work contains a descriptive catalogue, in abbreviated terms, of the *generic* and *specific* character of upwards of 6,000 plants, such as are best adapted for the green-house, plant-stove, or decoration of the pleasure-ground, or such as appear the most interesting to the botanist and amateur in the British flower-garden;" the descriptions of which, although much compressed by being within a small compass, will render considerable assistance in the identifying of the numerous genera and species. These distinguishing peculiarities will, it is hoped, characterise the arrangement of the plants in this work, from those of any other catalogue. The accompanying Glossary (of terms used), will elucidate the various abbreviations in the catalogue part of the Work. The Second part of the Work, comprises the Plans of the Parterres, Pleasure Grounds, Greenhouses, Plant Stove, Heathery, and other erections, with a description of the different subjects enumerated; the soil, and the general management best adapted for the growth of the Cape, Botany Bay, and other exotic plants. The Third part is confined to the plans and details relative to the Kitchen Garden department, with lists of the fruits cultivated; and comprises numerous designs for the erection of Forcing Houses,

Culinary Pits, &c. with an account of the materials best adapted for their erection, and mode of heating by hot water, &c.; and lastly, the general routine of culture pursued throughout the year, in the Forcing Department.

The Title Page expresses that "the Catalogue contains the description of upwards of 6,000 ornamental plants, which are cultivated at Woburn Abbey." It is arranged according to the Linnæan system of classification, and in the following manner:

Systematic name.	English name.	Form of leaves.	Colour of flower.	Month of flowering.	Native country.	Year of introd.	Soil and propagation.
CANNA Indica.	Indian Shot.	Calyx of 3 leaves.	Cor. of 6 petals.	Red.	1—12.	W. Inds. 1580.	S.P. Sandy loam, seed & cuttings.
	Indian. acum. nerv. smooth.						

As a catalogue of the plants it contains, it is, as our readers will perceive, very clear, expressive, and well arranged. The species and varieties being alphabetically placed, makes the reference to individual species easy to be found. This attention is not paid in any other catalogue we have seen. We hesitate not in stating that it is every thing the author professes it to be.

In the second part of the book are fifteen remarkably well-executed copper-plate and lithographic impressions. The subjects are—1. South-West View of Woburn Abbey; this is placed as a very neat frontispiece.—2. Entrance Gate, &c. to the Park.—3. A Plan of the Pleasure-Ground. Letter-press illustrations, descriptive of—A covered Walk 1342 feet long, open on one side, supported by pillars adorned with creepers; Sculpture Gallery, Greenhouse for Pelargoniums, Riding House, Tennis Court, Stable Courts, Chinese Dairy, Larders, Rock-work, Willow Garden, American Bank of an acre extent, Garden for Hardy Heaths, Cape Heaths when exposed, collection of Hollies, Rosarium Scoticum, Grass Garden, Menagerie, Canary Room, &c.—4. The Duchess of Bedford's Flower Garden, in front of the private apartments, and Parterres in front of the Libraries. The description consists in detailing the disposition of plants, &c. in the garden,—5. Parterres in front of the Sculpture Gallery; description of plants disposed in the beds.—6. Ground plan, front elevation, and section of the Greenhouse. Description of the construction of the Greenhouse. Management of the Greenhouse and Conservatory.—7. Ground plan of a Pinery, of two pits heated by one boiler; section and ground plan of the Plant-Stove,—Description. Construction of the Plant-Stove. Management of Hothouse Plants.—8. Plan, elevation, and section of the Heath House,—Description. Management of the Heaths. Propagation.—9. Hardy Heath Garden; List of Heaths, &c.—10. Menagerie, Description of.—11. Outer and Inner Entrances to the Menagerie.—12. Gardens of the Duke's Children when young, designed by Mr. REPTON,—Description of.—13. Drakeloc Pond, the Chinese Temple and Evergreens, Description of. Holly Hedge 500 yards long, &c.—14. Henry the Seventh's Cottage (Gothic), at the extremity of Apsley Wood, Description of.—15. Labyrinths at Apsley Wood.

The descriptive remarks following the plates are very interesting. The observations on the management of plants are judicious, concise, and useful. We subjoin an extract, on the propagation and culture of Heaths, that our

readers may judge of the propriety of our remarks. The descriptions of the plant houses, mode of heating by hot water, are also practically plain, and contain some valuable hints, and other particulars, which would be found of much utility to persons constructing houses.

The third part of the work is Horticulture. (This we shall extract from and insert in our *Record Magazine*.) There are eleven plans of hot-houses, &c., with remarks on heating and otherwise constructing them. The letter-press descriptions consist of details concerning the buildings, management of them, planting and pruning fruit trees, forcing the cherry, strawberry, &c.

The instructions given relative to the culture of the fruits and vegetables included in the third part of the work, are plain, sensible, practical remarks, and, as implied in its Title, they are doubtless the results of the practice of Mr. FORBES, and, we confidently add, of a very clever gardener; and we hesitate not to assert, that those who follow them will not be disappointed. We most cordially recommend the work, as being both interesting and useful.

"ON THE PROPAGATION AND CULTURE OF CAPE HEATHS.—Cape Heaths being of much shorter duration than most other cape plants, it is necessary to have constant recourse to propagation, in order to keep up the collection, which should be increased by cuttings, and seeds; the latter forming the only means of procuring new varieties. They should be both introduced direct from the Cape, and saved from those plants that perfect their seeds in the heathery or greenhouse, in this country, collected as they ripen, and a general sowing made in the ensuing February, or March. The pots intended for the seeds should be filled about half full with the drainage, and the remaining space with the soil, which should be intermixed, so as it may consist of half peat and half sand, finely sifted, for the depositing of the seeds, and rendered perfectly level, when the seeds may be sown, but observing not to bury them too deep in the soil; a very slight covering will be quite sufficient. In short, if they are merely covered, it will be all that is necessary. After the seeds are committed to the soil, they should have a gentle sprinkling of water, to settle the soil about them; which must always be given to the seed-pot by a very fine rose on the watering pot. The seed-pots should then be placed in a cool frame, where they can be shaded from the mid-day sun, and the soil in the pots kept in a moist and vegetating state. As soon as any of the seeds begin to vegetate, and make their appearance through the soil, a little air ought to be given, which will prevent the young plants from being drawn up weakly, and damping off. When the seedling plants have attained the height of two or three inches, they should be put into small-sized pots, in the same soil as was mentioned for the sowing of the seeds in. Five or six plants may be round the edges of each pot, which should be again replaced in the frame, and kept shaded, until they begin to strike root in the fresh soil, when they may be gradually exposed to the sun and air; and after they appear to have got well rooted, and are growing freely, they should be put out singly into small-sized pots, with as much of the soil attached to the young fibres as possible. When the plants are young, they will require to be frequently shifted; but this operation must be performed according to their growth, and as they fill their pots with young roots.

"But the most general method of increasing the Heath in this country, is by propagating from cuttings of the young shoots, which should be taken off when the wood becomes of a firm texture, when it will not be so liable to be injured by damp, as is frequently the case when put into the cutting pot in a tender state. The best season for putting in Heath cuttings, is from March to July; but the operator must be guided in this by the state of the shoots which are intended for this purpose. In fact, most of the species will strike root if put in at any time of the year, provided the cuttings are taken off when in a fit state. To procure shoots of the less free growing sorts, they may be as-

sisted by placing the plants in a little artificial heat, at the early part of the season, which will be the means of furnishing good cuttings; when they should be carefully stripped of their leaves to about half the length of the cutting, with a sharp knife or scissors, and the end cut clean across. They will then be ready for inserting into the cuttings pot, that should be previously prepared, and filled within a couple of inches to the rim with the drainage; and then have a layer of the fibrous parts of the soil placed over the cracks, when the remaining space should be filled up with sharp pit sand, well washed, and cleared from all earthy matter, &c. The sand should, lastly, be well watered, and made perfectly firm and level, when it will be fit for the reception of the cuttings, which should not be inserted deeper in the sand than is necessary for the fixture of them, to avoid being displaced in the watering, which should be liberally supplied while they are striking root.

"Many of the sorts will have formed good roots in the course of eight or ten weeks, whilst others will require as many months. In autumn and spring the cuttings should be placed in a shaded part of the stove; but in the summer season, they will succeed equally well in a cold frame, shaded from the mid-day sun. Mr. MUIRHEAD, a very successful propagator of the *Ericæ*, formerly plunged his pots in coal ashes, behind a north wall, in the summer season, where they were covered with hand-glasses, and removed in autumn to the pine stove. The cuttings will, in general, strike root more readily by being covered with bell glasses, the size of which should be regulated by the pots, and be occasionally wiped when there appears an accumulation of moisture on their inner surface; but these glasses may consist of those with holes in their tops, which will permit the moisture to evaporate, and prevent it, in a great measure, from injuring the cuttings. Mr. M'NAB, however, and the Messrs. LONDIGES, both consider these glasses unnecessary, except for a few sorts. When the cuttings begin to grow freely, it is generally a sure sign of their having made roots; they should then be taken carefully out, and put into the smallest sized pots that are made, placing four or five round the sides of each, and then placed under a hand-glass, and shaded, until they begin to make young roots in the fresh soil, when they may be gradually exposed to the sun and air; and when they appear to be of sufficient strength, and their roots well established in the soil, they should be planted singly into small pots, and afterwards treated in every respect the same as was mentioned for the seedlings.

"The culture of the *Ericæ* is rendered more easy by their being seldom attacked with insects; the green fly will occasionally infest some of the plants, but it is easily eradicated by fumigation, or by dipping the infested shoots into a decoction of tobacco-water. Some of the species are also subject to mildew; but this is likewise readily subdued, by dusting a little sulphur over the affected parts; the most effectual preventative for the latter disease, however, is a free circulation of air amongst the plants."

(TO BE CONCLUDED IN OUR NEXT.)

EXTRACTS.

Plants figured in the following Periodicals for December:—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Lupinus incanus*, Hoary Lupine. Class, Diadelphia; order, Decandria; natural order, Leguminosæ. The beautiful genus of Lupine, of which the greater number of species, hitherto enumerated in our Universal Floras, are natives either of the South of Europe or of the Andes of Peru, has been greatly increased by the discoveries of Mr. DOUGLAS on the north west coast

of America, where that indefatigable naturalist has detected no less than 17 species in his first visit to the shores of the Columbia, and several have rewarded him on his second visit, as well as in California. Thus the genus may be considered to have its maximum on the western side of the Cordillera of North America. The present very handsome species is a native of South America, and was raised by Mr. NEILL, from seed sent by Mr. TWEEDIE of Buenos Ayres, and flowered freely in the greenhouse at Canonmills, in June, 1833. The plant is suffruticose, (somewhat woody,) erect, branched. Leaves (about six inches across) digitate, leaflets about nine, linear-lanceolate, silky on both sides. Flowers: corolla, pale lilac; vexillum, orange, and slightly spotted in the middle; keel, of a deep purple at its point. Culture: hardy, growing in any good garden soil. Increased by seeds, or division of plant. *Lupinus* from *Lupus*, a wolf; supposed to destroy the fertility of the soil.

2. *Anthyllis Webbiana*, Rose-coloured Kidney-Vetch, or Lady's Finger. *Diadelphia*, *Decandria*. *Leguminosæ*. Root, perennial. Stems, one or more from the same root, erect, six to eight or ten inches high, branched. This species was communicated by Mr. CAMERON in May last, from the Botanic Garden of Birmingham. It has been introduced from Teneriffe by PHILIP BARKER WEBB, Esq. It is indeed an extremely delicate and pretty plant. Flowers: terminal, in compound heads, rose coloured. It is hardy. Culture: increased by division. Soil: it should be cultivated on a dry soil. *Anthyllis*, from *Anthos*, a flower; and *ioylos*, a beard, or down, in consequence of the hairy or downy calyces. The most popular of its English names has been given from a fancied resemblance in the bracteas to the fingers of the human hand; hence *Lady's Finger* (not *Ladies' Finger*, as commonly written), the fingers of our Lady, the Virgin Mary, to whose honour many plants were dedicated by our forefathers.

3. *Grevillea arenaria*, Sand Grevillea. *Tetrandria*, *Monogynia*. *Proteaceæ*. This plant is an old inhabitant of the English gardens, flowering freely in the spring months, only requiring the shelter of a well-lighted greenhouse. It is found in the alluvial, sandy banks of the Hawksbury River, in the colony of New South Wales, where, however, it appears to have a limited range.—Flowers: bluish purple. Culture: increased by seeds or cuttings. Soil: loam and sandy peat. *Grevillea*, in compliment to C. F. GREVILLE, a patron of natural science.

4. *Andromeda salicifolia*, Willow-leaved. *Decandria*, *Monogynia*. *Ericææ*. This plant is an inhabitant of the tropics, and not in elevated situations. It was first discovered in the Mauritius by COMMERSON, and we are informed by Mr. TELFAIR that it is plentiful in the woods of BelomPre. Messrs. HELL-SINGBOURG and BOYER gathered it in hilly places on the banks of rivers in the province of Emirena, Madagascar. It was introduced to the garden of the late ROBERT BARCLAY, Esq. by the late Mr. TELFAIR. (The latter gentleman died, after an illness of five days, on the 14th of July.) The plant is of a low shrubby growth, glabrous throughout. The colour of the flowers is of a greenish hue, partaking little of the fine purple so remarkable in drawings from living native specimens. Culture: it requires the protection of a warm greenhouse, and should be cultivated in soil containing a considerable proportion of peat. Increased by layers. *Andromeda*, from the Virgin *Andromeda*.

5. *Nuttallia Papaver*, *Papaver* (Poppy) like *Nuttallia*. *Monadelphia*, *Polyandria*. *Malvacæ*. This plant, it appears, has been sent from the Southern States of North America. There are three species now introduced into this country, (see page 125, Vol. 1.) The species are hardy, ornamental, and perennial, "appearing to afford an additional link of connection between the Genera *Sida* and *Malva*;" for whilst the present species has all the habit of the other *Nuttallias*, there is the involucre of a *Malva*. The plant has numerous stems arising from the crown of the root, ascending, slightly hairy. Flowers: corolla of five petals, campanulate, large, red purple, pale towards the centre of the flower. *Nuttallia*, in honour of Mr. THOMAS NUTTALL, Professor of Mineralogy, Cambridge.

6. *Pimelea graciliflora*, slender flowered. *Decandria*, *Monogynia*. *Thymelææ*. Of this genus the species are very difficult to be distinguished, and at first sight, the present plant might be easily taken for the *P. sylvestris*, (see Vol. 1,

p. 231,) it flowers at the same season; but the leaves of the present species are narrower, are marked with impressed dots on the upper surface, and the flowers are pure white, with a much slenderer and more filiform tube. It is extremely pretty, flowering freely in the greenhouse in common peat soil, and retaining its snowy blossoms for a considerable length of time. It was raised from seeds sent by Mr. BAXTER, from King George's Sound. *Pimelea*, from Pimele, fat.

7. *Marsdenia flavescens*, yellowish flowered. Pentandria, Digynia. Asclepiadæ. This species was found by Mr. ALLAN CUNNINGHAM, who discovered it in New Holland, on the sea shore, at the Illawana district, in lat. $34^{\circ}10'$, whence living plants were imported to his Majesty's gardens at Kew, where they flower throughout the summer months. It is a climbing plant, with yellowish green flowers, of little merit. *Marsdenia*, so named by Mr. BROWN, in compliment to WILLIAM MARSDEN, Esq., an encourager of botany, and the able author of a History of Sumatra.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany, in the University of London. 4s. coloured, 3s. plain.

1. *Libertia formosa*, handsome *Libertia*. Monadelphia, Triandria. Iridæ. This plant was found by Mr. JAMES ANDERSON, in the Island of Chiloe, growing on the sea shore, within reach of the waves. It is a half hardy herbaceous plant, flowering in May; stem, rises about one foot four inches high, with about three stem leaves; root leaves from half to one foot long, sword shaped. Flowers capitate, from eight to ten in each head, white. The plant is increased by dividing the root stock. *Libertia*, so called in compliment to Mademoiselle M. A. LIBERT, a learned Belgian botanist.

2. *Combretum grandiflorum*, large flowered. Decandria, Monogynia. Combretaceæ. This is one of the many noble plants in which the colony of Sierra Leone abounds. It is not a climber, as it is sometimes called, but rather a scrambling plant, raising itself upon other plants by means of a very curious kind of hook with which it is supplied. At first sight one would wonder what this hook can be; for nothing like spine or prickles, or tendrils, can be discovered upon the branches; for want of these, it is necessary that their place should be supplied by some special provision, which is of the following kind. When the leaves are first fully formed they are seated upon a footstalk of a very common appearance; but after a time they fall away, leaving the leaf-stalk behind; the latter does not wither up, but gradually lengthens, hardens, sharpens, and curves, till at last it becomes a powerful hook, admirably adapted for catching hold of the branches of any tree that it may be near, and thus elevating the plant from the earth.—In this country it can only be cultivated in the stove, where it forms a bush of a few feet in height; and where its hooks are not produced—they appear only in its native woods, where it is more vigorous, and where alone it has occasion for them.—It flowered at the Duke of Buccleugh's, in 1832, for six weeks at least, producing at least one hundred clusters of its splendid red flowers. It is a most desirable plant, and ought to be in every collection of stove plants. Culture, increased very readily by cuttings. Soil: a rich mould. *Combretum*, a name applied by Pliny, to a climbing plant.

3. *Pultenæa subumbellata*, Subumbellate *Pultenæa*. Decandria, Monogynæ. Leguminosæ. It is a hardy greenhouse plant, a native of Van Dieman's land. It is cultivated in Mr. Lowe's nursery, at Clapton. A pretty small narrow-leaved plant, producing its yellow flowers in terminal heads of numerous blossoms. Culture increased by cuttings. Soil: sandy loam and peat. *Pultenæa*, in compliment to Dr. WILLIAM PULTENEY, a botanical author.

4. *Passiflora kermesina*, crimson Passion flower. Monodelphia, Pentandria. Passifloræ. This species was brought to the London Horticultural Society's Garden, by Mr. BENTHAM, in 1831, from Berlin Garden. It has been almost ever since in flower. It is beyond all comparison the most beautiful species in cultivation, except *P. racemosa*. Its flowers have a purple crimson richness of colour which art cannot imitate; they are produced in great abundance at almost all seasons. Unfortunately it is propagated with considerable difficulty, no part of the stem striking from cuttings except what is very woody and completely formed; and this, which is always at the bottom of the stem, can scarcely be procured without cutting down the whole plant. The plant requires a hot and damp stove. *Passiflora*, from Flos, flower, and passio, passion; flower appendages.

5. *Passiflora gossypifolia*, cotton leaved Passion flower. Monodelphia, Pentandria. Passifloræ. A native of several of the tropical parts of America. It has been found by Dr. HAMILTON in the West Indies, and by Messrs. DEPPE and SCHIEDE, in Mexico. About Lima, in Peru, it seems to be common. It is grown in the Horticultural Society's Garden, where it flowered in 1832. It is not a plant of much interest, unless minutely examined. Flowers: white, small. A perennial stove plant, increased by cuttings. *Passiflora*, see No. 4 above.

6. *Anthurium gracile*, slender. Pentandria, Monogynia. Aroidæ. Synonyms, *Pathos*, *gracilis*. This species is a native of the tropical parts of America. It has been sent from Demerara to Mr. RICHARD HARRISON, through the assistance of THOMAS MOSS, Esq. of Liverpool. It has little beauty when in flower, but its spikes of crimson berries give it rather a pretty appearance when in fruit. It requires a stove heat, and a treatment similar to that of epiphytal orchideous plants. *Anthurium*, from anthos, a flower, and rium, a tail; in allusion to the form of the spadix.

7. *Gesneria Suttoni*, Captain SUTTON's Gesneria. Didynamia, Angiospermia. Gesneræ. For the communication of the drawing and following account of this new plant, we are obliged to Mr. W. B. BOOTH, Gardener to Sir CHARLES LEMON, of Carclew. We owe the introduction of this fine plant to Captain SUTTON, of his Majesty's Packet Establishment, at Falmouth, who informs us that he found it growing in a wood, on a sloping hill, near the Bay of Bomviago, Rio de Janeiro, at an elevation of between 30 and 40 feet above the level of the sea, and not exceeding 40 yards from the water. Its beautiful flowers attracted his attention, and induced him to dig up the plant and bring it home. On his arrival in England, in March, 1833, he presented the choice collection of Orchideous, and other interesting plants he had found, to Sir CHARLES LEMON, Bart. M.P., and GEORGE CROKER FOX, Esq. Grove Hill, Falmouth, in whose garden the present plant flowered under the judicious management of Mr. FRIEND. It has some resemblance to *Gesneræ bulbosa*, but differs from it in foliage, as well as in the flowers, which are larger, and have a broader outstretched upper lip. Flowers: of a fine scarlet outside, inside of a yellowish red. It is named in compliment to CAPTAIN SUTTON. Culture: it requires the constant heat of the stove, and a strong rich soil. Increases by cuttings.

8. *Cyrtochilum flavescens*, straw coloured. Gynandria, Monandria. Orchideæ. A native of Mexico, whence it was imported by Mr. TATE, about three years ago. It flowered for the first time in the collection of RICHARD HARRISON, Esq. of Aighburgh, to whom we are indebted for a specimen, along with a sketch from Mrs. ARNOLD HARRISON. Flowers: sepals, yellow; labellum, yellow, with blood-coloured spots. *Cyrtochilum*, from Kurtos, convex, and cheilon, a lip; in allusion to the form of the labellum.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s.; plain,
2s. 3d.

1. *Clematis campaniflora*, Bell-flowered Virgin's Bower. Polyandria, Poly-

gynia. Ranunculaceæ. This very distinct species was discovered by the late Professor BROTERA in hedges on the road leading from Coimbra to Oporto, flowering in June and July, and first recorded by him. Its habit is entirely that of *C. viticella*, to which it also comes nearest in affinity, but the much smaller flowers, and pointed sepals, connivent below, will readily distinguish it. The plant appears to be perfectly hardy. Flowers: fragrant; white, with a slight shade of purple. Increased by layers or seeds. Clematis, from Kilema, a vine branch, in allusion to the climbing habit of most of the species of this genus.

2. *Gilia aggregata*, Tufted flowered. Pentandria, Monogynia. Polemoniaceæ. A native of the north-west coast of America, whence it was introduced to the Garden of the London Horticultural Society by Mr. DOUGLAS, in 1827. When in blossom, few plants of this family surpass it in beauty. Leaves, deeply pinnatifid. Flowers: copious, fasciculate, often disposed in a diffuse panicle; of a scarlet colour, with the mouth of the tube marked with numerous white spots. It is a very desirable plant for the flower-garden. The drawing was taken from Mr. KNIGHT's collection at Chelsea, in July last. The plant is biennial, but will bloom the first year, as well as the second. *Gilia*, so named after Signor GIL, a Spanish botanist.

3. *Salvia angustifolia*, Narrow leaved. Diandria, Monogynia. Labiataæ. Synonyms, *S. virgata*, *S. virgalâ*. A native of dry mountainous places in the temperate parts of Mexico, whence it was introduced into the Royal Gardens at Madrid in 1795. Flowers: of a deep azure blue. It grows well in any light soil, and is readily increased either by seeds or cuttings. It will flourish in the open ground in summer, but requires protection in winter. If not taken up, it perishes. *Salvia*, from *salvas*, safe, medicinal qualities.

4. *Calceolaria sessilis*, Fragrant Slipperwort. Diandria, Monogynia. Scrophularinæ. Synonyms, *C. sessilis suffruticosa*. We are indebted to Mr. KNIGHT, of the Exotic Nursery, King's-road, Chelsea, for the fine specimen from whence the drawing was taken. It had been raised from seeds collected in Chile by Mr. CUMING. It requires a light sandy soil, and is easily increased by seeds and cuttings. This species is nearly related to *C. integrifolia*. The flowers are yellow, crowded into a thyriform panicle; they are also fragrant, with a faint resemblance to that of the Garden Hyacinth. *Calceolaria*, from *calceolus*, a slipper, referring to the form of the corolla.

The Botanical Cabinet. Edited by Messrs. LODDIGES's. Coloured, 5s.; partly coloured, 2s. 6d.

1. *Aconitum Stoerckianum*, Stoerck's Aconitum. Polyandria, Trigynia. Ranunculaceæ. A native of Austria; hardy perennial; and a very showy plant, flowering in August. In a pot it grows a foot and a half in height, but planted out in the open border, will attain to twice or thrice that size. The flowers are of a blue purple colour. It may be increased by separating the roots, which are knobby, and will grow in any good garden soil. Aconitum, from Acona, several varieties being plentiful about Acona in Bithynia. *Stoerckianum*, from Baron VON STOERCK, a celebrated physician.

2. *Erica Everana pilosa*, Ewer's pilose-leaved. Octandria, Monogynia. Ericææ. A native of the Cape of Good Hope, introduced in 1800. The flowers are a beautiful pink, with green ends; they come out in July and August, and last a considerable time; in a pot it will attain the height of two or three feet. It requires the usual airy greenhouse protection, will increase by cuttings, and should be potted in sandy peat earth. *Erica*, from Freicks, to break; fragility of the branches.

3. *Erica procumbens*, Procumbent Heath. Octandria, Monogynia. Ericææ. A native of the Cape of Good Hope, introduced a few years since; it produces its pleasing pink flowers during the summer months. It requires the same treatment as the above variety.

4. *Villarsia Chilensis*, Chili Villarsia. Pentandria, Monogynia. Gentianææ.

This plant is a native of Chili, and has been very lately introduced. It flowers in June, with a stem about a foot in height; the flowers are very pretty, of a sulphur colour, and open a few at a time in succession, each lasting but a short while. It will increase by separating the root, and should be potted in rich loam, with a pretty large allowance of water. Villarsia, from VILLARS, a distinguished French botanist.

5. *Hibiscus Liliiflorus*, Lily-flowered Hibiscus. Monadelphia, Polyandria. Malvaceæ. This elegant plant, of which there are many varieties, was introduced a few years since by Mr. BARCLAY. It is necessary to preserve it in the stove; it grows freely, and flowers during the summer. The flowers are of a bright rosy lilac; it is necessary to preserve it in the stove, as it is a native of the Mauritius. It will increase readily by cuttings, and should be potted in loam and peat soil. Hibiscus, from Ibis, a stork; said to chew and inject as a clyster.

6. *Linum Cumingii*, Cuming's Flax. Pentandria, Monogynia. Caryophyllææ. This pretty little plant is a native of Chili; it was introduced in 1830, by Mr. CUMING. It is very dwarf in its growth, not much exceeding six inches from the ground; and its brilliant yellow flowers are produced during nearly the whole of the summer. It requires the greenhouse, may be propagated by cuttings or seeds, and should be potted in light loam. Linum, from Llin, a thread.

7. *Lantana involucrata*, Involucrate Lantana. Didynamia, Angiospermia. Verbenaceæ. A native of the West Indies. It has been long known and cultivated, but has never become very common. It requires the stove, and bears its pretty flowers throughout the spring and summer; the colour of the flowers is lilac, with a yellow eye. There is no difficulty in increasing it from cuttings; the soil should be rich loam.

8. *Leptospermum ambiguum*, Ambiguous Leptospermum. Icosandria, Monogynia. Myrtaceæ. A native of New South Wales, and was among the early introductions from that productive country; it grows to the height of four or five feet, and is well furnished with pendulous branches, which, loaded with its pale yellow flowers, are very ornamental; the season of flowering is June and July. It requires the greenhouse protection, and is increased with facility by cuttings; the soil should be loam and peat. Leptospermum, from Leptos, slender; and sperma, a seed.

9. *Cirrheæ Warreana*, Warre's Cirrheæ. Gynandria, Monandria. Orchideæ. This is a native of Brazil; it was discovered by Mr. WARRE, who kindly communicated it to Messrs. LODDIGES's. It bears a strong resemblance to the other species; they are all highly interesting and curious plants, well deserving every care and attention. Flowers: yellow, red, and dark purple. The plant succeeds well in the stove, planted in moss, with potsherds, and a little sandy peat soil. Like the others, it will admit of occasional increase by dividing the bulbs. Cirrheæ, from Kirrhos, yellow, flowers.

10. *Cynoches Loddigesii*, Loddiges's Cynoches. Gynandria, Monandria. Orchideæ. This extraordinary plant is a native of Surinam. It was sent to Messrs. LODDIGES's in 1830, by Mr. LANCE; and it flowered in May, and again in the winter of 1832. Flowers are green, whitish, with chocolate spots, very singular in its appearance, and very handsome. It is cultivated in the stove, suspended from a rafter, and planted in moss and broken bits of pot. It has not yet increased,

The Botanic Garden. Edited by Mr. B. MAUND, F. L. S.

Coloured: 1s. 6d. large; 1s. small.

1. *Madia elegans*, elegant Madia. Syngenesia, Superflua. Compositæ. This newly introduced annual is a native of America; and though not of an exceedingly splendid character, attracted considerable attention during the last summer. It was introduced in 1831. Its flowers are really pleasing; of a yellow colour, with a circle of red towards the centre; its petals, when fully exposed to the sun, curl and twist, exhibiting a curious though half withered

appearance; it usually grows to the height of two feet; and flowers from July to September. It requires only the usual treatment of annuals, giving it a shady situation, that its flowers may the more regularly continue expanded. The generic name, *Madia*, is from the word *Madi*; a term employed by the Chilians, to distinguish one of the species of this genus.

2. *Pentstemon Richardsonii*, Richardson's *Pentstemon*. *Didynamia*, *Angiospermia*, *Scrophularinæ*. A native of Colombia, introduced in 1825; perennial; grows to the height of eighteen inches; flowers from July to August, of a pinkish purple colour. It does not admit of division at the root, and should be increased by cuttings, about Midsummer, which readily strike root. *Pentstemon*, from *Pente*, five; and *stemon*, stamen. *Richardsonii*, from the name of an English botanist.

3. *Centaurea Crocodylium*, bluish *Centaury*. *Syngenesia*, *Frustranea*. *Compositæ*. A native of *Levant*; introduced in 1777; grows to the height of eighteen inches; flowers, July to August. This plant, as an annual, affords a pleasing variety in the borders, continues long to produce its delicate pink flowers, and does not become straggling and obtrusive. It requires only usual treatment. *Centaurea*, from the Greek *Kentauros*, signifying a centaur. *Crocodylium*, is said to have been applied to this plant from some fancied resemblance of the spines of its calyx to the claws of a crocodile.

4. *Delphinium Consolida*, branching *Larkspur*. *Polyandria*, *Trigynia*. *Ranunculacææ*. A native of *England*, grows in corn fields; rare; annual, grows two feet high; flowers, from June to August. *Delphinium*, from the Greek, *Delphin*, dolphin; supposed resemblance of the nectary. *Consolida*, from the Latin *consolidare*, soldering, or closing up a wound.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

I am afraid you will think me troubling you too much, concerning the cultivation of plants; but your Magazine is so entertaining, and has created such a zeal for flowers in me, that I cannot resist requiring it. Would some of your correspondents favour me with the best manner of cultivating that beautiful class of flowers, the *Bignonias*, and *Staphelias*. I should feel much gratified also, with the proper quantity of water, on an average, Greenhouse plants ought to have in winter, and the best temperature of the house during that season.

X. Y. Z.

I shall feel greatly obliged to any of your readers who will inform me, through the medium of your Magazine, the manner of propagating the *Bignonia*, as I have tried several ways without success.

E. J. B.

Limehouse, Nov. 15th, 1833.

Will any of your readers be kind enough to inform me what culture *Myrtles* require, so as to make them produce their fragrant blossoms?

Oct. 22nd, 1833.

T. G. S.

I frequently see, in the *Floricultural Cabinet* and other works, mention made of 48's and 60's sized pots. It would be very satisfactory to myself, and perhaps to many others, if thyself or some correspondent of the *Cabinet* would inform us the size in inches of 32's, 48's, 60's, &c. &c. &c.

Truro, 11th Mo. 7, 1833.

A SUBSCRIBER.

I should feel obliged if you or any of your readers would describe the best way to cultivate that noble flower the *Dahlia* from seed—I mean the most

approved method to obtain fine double flowers—whether cross fertilization should be resorted to; if so, what kind of blossoms should be made choice of, and how the pollen is to be applied, and whether any dependence can be placed on the progeny partaking of the properties of its parent. Being fond of a garden, but not having much skill in the science, I am anxious to acquire a little knowledge therein.

A LEARNER.

August 9th, 1833.

I shall be obliged if the Conductor of the *Cabinet*, or any of its readers, would give a few instructions on the culture of the Double Anemone.

Norwich, Nov. 28th, 1833.

B. C. L.

ANSWERS.

In your last Number of the *Floricultural Cabinet*, I see a Query signed AMICUS, in answer to which I beg to call his attention to a very pretty yellow, dwarf, free blooming flower, the *Linum arboreum*. It would look well in a bed, and would form a very pretty variety with the *Verbena Melindris*, and the *Lobelia Gracilis*.

VAN THOL.

In reply to the inquiry of AMICUS, in your Number for November, allow me to say, that I visited the nursery grounds of Messrs. MILLER and Co. at Clifton, and found one portion of their garden was laid out in small compartments, each allotted to a particular plant; such as the *Anagallis monelli*, *Verbena melindris*, &c. &c. Amongst the rest, the *Thunbergia alata*, attracted my attention, as I had only seen this plant previously trained as a climber, but there it covered the whole bed, and flowered profusely.—If the delicate yellow of this beautiful plant, would afford the contrast your correspondent desires, I should recommend the plan, of having slight willow rods bent across the bed, at a few inches above the surface, and training the plants along them; this would prevent their flowers being so much dashed by the soil in wet weather.—I feel greatly interested in the success of your useful little *Cabinet*, with which I am much pleased.

Nov. 5, 1833.

META.

REPLY ON GRAVELLY SOIL.—I beg to inform Mr. STEPHEN CANNON, that the cheapest and best way of rendering the soil he mentions productive, is to cover it over a foot thick with mud and marl; about three parts of the first, and one of the latter, with a good coat of rotten dung, and afterwards to spade it over three or four times before planting it. This will last but a certain number of years, unless fresh soil be added with every coat of dung. When brisk earth and rotten horse litter in equal parts, and well mixed, are the best that can be used.

Dec. 9, 1833.

INNOVATOR.

REMARKS.

NEW AND SUPERB DAHLIAS.—We have made applications to the most renowned Dahlia cultivators, for information as to which are the most perfect and splendid kinds that will be offered for sale the coming season. For this Number of our Magazine we insert a list of sorts which are in the possession of Mr. WIDNALL, Grantchester, Cambridge. Mr. WIDNALL informs us that he has *proved* all the kinds, and that the descriptions as to height and colour are *correct*, and that the kinds enumerated possess a superiority of properties. From a confidence of Mr. WIDNALL's judgment of a Dahlia flower, we can most confidently recommend the kinds in the annexed list to our readers.

Names.	Description.	Height in ft.
Alba fimbriata.....	Delicate white, with fringed petals.....	3 to 4
— purpurea.....	White and purple	3
Belladonna	Ruby, purple and white ..	3
Felgatis's Negro	Very dark.....	3 to 4
Foster's Erecta	Crimson, with black stripe.....	3
— Negress	Fine dark.....	3
Grand Duke of Tuscany..	The finest black ever seen	3 to 4

Names.	Description.	Height in ft.
Jeanne Insurmountable ..	Fine yellow	4 to 5
King of the Yellows	Primrose yellow	4
Lady Grey	Striped shaded rose and white	3
Lord Liverpool	Fine dark peuce	5
Marchioness of Abercorn..	White and purple, mottled	3
Metropolitan	Fine rose	2 to 3
Neptune	Superb large lilac (best known).....	3 to 4
New Scarlet Turban	Fine deep scarlet.....	4
Pencilled White	Beautiful cupped petals.....	3 to 4
Pothecary's Queen of Sheba	Fine violet	3
Picta formosissima	Bright pale orange, with bright scarlet stripe	4 to 5
Queen of Dahlias	Pure white, with beautiful rosy lilac edge— a very superior kind	3
Shannon	Dark crimson	4
Sir Robert Peel	Fine buff	4 to 5
Springfield Rival	Dark rosy crimson, beautiful globular shaped	4 to 5
Widnall's Black Prince ..	Rich crimson, with black stripes	3 to 4
— Carna.....	Large beautiful purple.....	4 to 5
— Cleopatra	Beautiful French lilac	3 to 4
— Comus	Fine primrose yellow	3
— Diana.....	Fine rose, with beautiful cupped petals ..	3 to 4
— Duchess of Bedford,	Fine vivid scarlet.....	3 to 4
— Enchanter	Shaded buff and lilac	3 to 4
— Golconda	Beautiful mottled white and purple	3
— Granta	Dark claret, extra fine shaped, with beauti- ful cupped petals.	4
— Iris	Purple, shaded or striped with red	4 to 5
— Jason	Bright golden yellow	5
— Othello	Superb dark peuce, very fine.. ..	4
— Perfection	Superb bright rosy crimson	3
— Remus	Fine light scarlet.....	3 to 4
— Rising Sun....	Large dark scarlet, extra fine	4 to 5

ON *CORNUS CAPITATA*, OR *BENTHAMIA FRAGIFERA*.—I send you a few seeds of the *Cornus capitata* of Dr. WALLICH, or the *Benthamia fragifera* of Dr. LINDLEY. This very valuable addition to our collection of hardy shrubs was raised in the garden of J. H. TREMAYNE, Esq. at Heligan, Cornwall, by Mr. ROBERTS, the gardener, from seed sent from Nepal, by Sir A. BULLER. It is a most beautiful evergreen shrub. The largest plant of it in Europe is now at Heligan, growing most profusely in the shrubbery at that place. It is seventeen feet high. It has flowered for several seasons, but was more magnificently in bloom this summer than I ever saw it before. In autumn the shrub has a most splendid appearance, by being loaded with large, globular shaped, reddish fruit. The shrub is readily propagated by seeds, cuttings, or layers, put in under a hand glass, having a light loamy soil. The berries ripened, for the first time, at Heligan, last autumn, and Mr. ROBERTS has some young plants raised from the seeds. I should feel pleasure in seeing a coloured figure of the plant in the *Cabinet*.

St. Austle, Sept. 23rd, 1833.

RICHARDUS.

[NOTE.—We have the figure in the course of preparation.—CONDUCTOR.]

ON THE PROPERTIES OF THE HYACINTH.—1. The stem should be strong, tall, and erect, supporting numerous large bells, each suspended by a short and strong peduncle or foot-stalk, in a horizontal position.

2. The whole should have a compact pyramidal form, with the crown or uppermost bell perfectly erect.

3. The bells should be large, and perfectly double, well filled with broad bold petals, appearing to the eye rather convex, than flat or hollow; they should occupy about one half the length of the stem.

4. The colours should be clear and bright, whether plain, white, red, or blue, or variously intermixed or diversified in the eye; the latter gives additional lustre and elegance to this beautiful flower.

REFERENCE TO PLATE.

LEVICK'S BEAUTY OF SHEFFIELD.—This very handsome and most profuse blooming Dahlia was raised from seed in 1832, by that most successful cultivator and raiser of this King of flowers, Mr. LEVICK, of Sheffield. We saw a number of the plants beautifully in blossom last August. It grows from two to three feet high.

MONTHLY FLORICULTURAL CALENDAR FOR JANUARY.

DAHLIAS.—When it is desired to propagate extensively any particular sort of Dahlia, the root should be excited by being placed in a hot-bed frame or a hot-house, by the middle of the month, or even earlier where practicable. Dahlia seeds may also be sown by the end of the month; the best method to adopt, is to sow the seeds in pots, place them in moist heat till the plants are up, and then gradually inure them to the greenhouse temperature.

DIRECTIONS FOR THE PLANT STOVE.—This department very often contains plants of a large size, handsome flowering, &c. As the houses are constructed on a variety of principles, the inmates of course require different modes of treatment. Some cultivators grow the plants plunged in tan, others on stages or shelves. Some houses are heated by means of fire flues, others by steam or hot water. In all cases, however, the temperature should be kept from 60 to 65 degrees by night, and from 70 to 75 by day, during this month. The surface of the pots should frequently be disturbed by means of a flat peg. All filth that may accumulate or gangrene on the top of the pots must be cleaned off as soon as perceived, and some fresh soil be given if required. Upon attention to these particulars in a great measure depends the healthiness of exotic plants. Watering should be carefully and duly attended to, never suffering the plants to droop for want of it. If the plants are plunged in tan, they will require less water than when placed on a stage, for if too much be given the plants will rot. Care must be taken not to water the tan in the least degree, or it will be an encouragement for worms, and these gaining admission into the pots, are very injurious to the plants. If any plants be infested with the mealy bug, white or brown scale, let them be washed with a weak infusion of sulphur and tobacco, and after applying it, be instantly removed, and be well syringed with clear water of the same temperature as the house. When air has been given during the day, let the house be closed early in the afternoon, whilst a portion of the warm air remains.

DIRECTIONS FOR THE GREEN-HOUSE.—Very variously constructed are the buildings in this department, but the best mode of heating them is by means of fire flues, as the least damp is very hurtful to the plants. The temperature should be regulated by the outward atmosphere, air being given at all times when mild, in order to keep the plants from being drawn; even in severe weather, admit a little air in the middle of the day, particularly after the house has been heated during the night. At night the front sashes should be covered with mats to exclude the cold air, and when frosty, or very foggy and damp, fire heat must be applied, keeping the heat from 43 to 48 degrees. Watering during the month must be very carefully performed, none being watered but what necessarily require it, taking care, however, not to allow any to droop. The same attention to cleanliness must be given as directed for the stove plants.

PLANTS IN FRAMES.—These require air at all times in dry weather, unless in intense frost, when the lights must be covered with mats and long litter; but if the nights be mild, the lights alone will be sufficient protection. Water must be given very sparingly. All appearance of mould or rottenness must be instantly removed. Bulbs that have been put in pots, may this month be removed to the stove, be regularly watered, and tied to suitable sticks as the flower-stems push forth.

The Flower garden requires little or no attention this month, excepting that Tree Pæonies and other gross plants should be protected from frost by means of mats.

F. F. ASHFORD.

Dec. 13th.

RIDGE, PRINTER, SHEFFIELD.





T. Gray Delin.

J & J. Parkin Sculp.



Gillia aggregata



Lady Haggerston Pink



Calandrinia grandiflora



J & J Parkin Sc.

Calceolaria formosum

Engraved for the Botanical Cabinet 1841

THE
FLORICULTURAL CABINET,

FEBRUARY 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Auricula.* By
INNOVATOR.

In forwarding you for insertion in your Magazine my method of treating the Auricula, I must confess I do it with reluctance ; but as none of your other correspondents have treated on it, and requests are made for a mode of culture, I send it, hoping it may prove serviceable. My reluctance arises from the ill success that attended the first seven or eight years of my growing ; this I attribute to the excessive richness of the compost I then used, being composed principally of old night-soil, sugar-bakers' scum, blood, and old cow and goose dung, with a small proportion of loam and sand. I had generally to buy in a fresh stock every year ; some few lived to flower two years, but they generally died off in the autumn, after they had been repotted. They certainly flowered superior to any I have since had, but they were sure to die. This loss, added to the advice of a Lancashire grower, induced me to alter my compost, and render it more simple ; and I believe mine are now as healthy as any grower's in England. The situation where I keep them is an airy part of the garden, where I have built a wall six feet high, and eight yards long ; this I have ornamented at the top, which is a great improvement. This wall runs from south-east to north-west. At 18 inches from the ground are built in five cross pieces of three-inch deal, and 7½ feet

long, so that they project 3 ft. 3 in. on each side; the ends of these are morticed into ten upright posts $2\frac{1}{2}$ ft. long; these stand a foot above the cross pieces, and are connected together at their tops by a long rail; this serves for the lower edge of the lights to rest upon. At four feet from the ground are built in a sufficient number of wood bricks, in each of which is an iron hook; to these are hung glazed lights 4 ft. by 3 ft. Across the pieces that project on each side the wall are nailed six splines, 3 in. broad and $1\frac{1}{2}$ thick; these should be of sufficient length to reach from one end to the other, as they will bear the weight of the pots better. The space that remains open below the lights may be closed by shutters, or a piece of thick canvass, in case of severe frost or wind. I hope I have made this intelligible, as it is by far the most convenient of any repository I have ever seen, for it serves both as a summer and winter situation; besides, the south-west side serves to flower many plants in after the Auriculas are removed to the north-east. A building of this sort costs about £10, but they can be made to any size, and are cheaper than any other repository.

The compost I now use is made as follows:—Fresh and rather sandy maiden loam, two barrowful, finely powdered; two-year-old night-soil, a barrowful; leaf mould, white sand, and rotten decayed bean-stalks, of each a barrowful; mix these well, and they are fit for use. All Auricula composts should be kept dry, as they retain their goodness longer.

The beginning of August shift and repot your plants; remove as much of the old soil as possible, and where the tap root is long, shorten it; remove all such slips as have got roots, but no others; put in the bottom of the pot a small oyster-shell, and upon this a handful of small cinders; then a sufficient quantity of compost, that when the plant is put in and moulded up, there is near an inch of the pot without mould. Water them, and return them to their places, where they may remain till December, keeping them moderately moist with rain water. In giving this, be careful not to pour it upon the leaves; and if, after you have given them the benefit of a gentle rain, any should settle in their crowns, extract it with a common syringe. About the beginning of December, remove them from the north-east side to the south, where they may remain till the end of March or beginning of April. During December and January, give but very little water; the drier they

are kept the better. They will now require to be covered at night with mats; this must be continued till after full bloom, as any frost would injure the colours, and spoil them. Give them all the warm rains that fall in February, but not longer than six hours at a time. About the middle of February top-dress them with the following compost:—Take of two-year-old night-soil and cow-dung, of each a barrowful; old hotbed leaf-mould and sand, of each half a barrowful: mix these well together. Remove as much of the old soil from the tops as can be done without disturbing the roots, and fill up close to the leaves with the above compost. Cut off all offsets, and pot them in sixties. Once a week in March and April, give them manured water, made by steeping pigeons' dung and sheep-droppings in rain water. By the middle of April the flower-stems will have risen sufficiently to thin out the pips to five, seven, or nine; this must depend upon the sorts; the middle pips are those to be clipped out. As soon as the bloom is over, unless you wish to save seed, break off the flower-stem, but leave at least two inches attached to the plant. If any of your flowers bloom in the autumn, pinch off the pips, but leave the stem to wither; for if broken close to the plant, it is a great chance but you lose it. Supply them with plenty of rain water all summer, and you will succeed.

There are some few particulars that I did not mention in the description of the repository, such as having a piece of thin board on each light to overlap the space, to prevent the rain dropping through; besides hooks and eyes, &c., to fasten the light up and down. But these things will easily suggest themselves.

Dec. 2nd, 1833.

INNOVATOR.

ARTICLE II.—*On the Culture of Justicia flavicoma, and interesting Remarks connected with its Botanical Character and Habits.* By the Author of "The Domestic Gardener's Manual," C.M.H.S.

Justicia, as a genus, has derived its name from an eminent horticulturist of Scotland—JAMES JUSTICE, whose work, "The Gardener's Director," was published in 1784. It contains a great number of species, above sixty of which are enumerated in the

latest publication of "The Hortus Britannicus." The genus, or family, forms one of the members of the tribe Acanthaceæ, constituting the 145th order of the sub-class Thalamifloræ, in the natural classification.

Acanthus is the type of the order, and the term is derived from a Greek word which signifies a plant or shrub abounding with thorn (*Ακανθα*). The plants of this tribe, however, are peculiarly noted for the elasticity of their seed-vessels (capsules), and the curiously hooked processes by which the seeds are attached. Their stems also are swollen just above the axils of the leaves, and these swellings give them a very peculiar appearance; cuttings at these joints strike with facility; generally speaking, this may be considered as the fact.

In the Linnæan system *Justicia* belongs to Class II. Order I. Diandria Monogynia; and is found in the second section of that order. The flowers are inferior, monopetalous, and irregular. The calyx is five parted, tubulous, equal. Corolla ringent, or gaping, divided into two nearly equal parts; the upper part or lip arched, and often reflexed; the lower lip divided into two or three equal parts, which are more or less reflexed or curled backward and inward. Antheræ, two-celled; style, long and protruding. Capsule bilocular, elastic, with two seeds fixed by little hooks.

Justicia flavicoma, or rather, I should say, *flavacoma*—that is, "Justicia with a yellow lock," or yellow tufted,—presents all the above essential generic characters, with the specific peculiarity of having the divisions of the calyx terminated by very long bristly points. Its flowers are produced in a close terminal spike, the whole of which is of a pale, yellowish, slightly green tint. This, with the tufty form of the spike, gives the name to the species. The spike is formed of a series of spikelets; each pair is opposite, the one to the other, and the pairs are in alternate order, at a right angle with the pairs above and below. The leaves also are in pairs, and in the same cross or rectangular order with themselves and with the flowers that terminate them. These leaves, in the plant at least now before me, assumed an appearance of similar interest. As the flower-spike advanced, and became well developed, from being flat and extending horizontally, they gradually curled in a curious direction towards the stem, some even bending almost spirally downward. They are large, very handsome, ovate-cordant,

highly glazed, and somewhat resemble the leaves of the Horn-beam, with the gloss of the Beech.

The plant is a ready flowerer. Mine is now scarcely six inches high : it showed bloom when less than half its present size, but as the roots were feeble, the shoot failed, and another was produced. I kept it in the pine-stove, wherein, throughout October and November, the heat during night ranged between 53 and 62 degrees. Late in November, I perceived that several unopened flowers fell off : I therefore removed the plant to a sitting-room. Some blossoms expanded in the course of a day, and now, exposed as it is to vicissitudes of temperature,—open windows in the morning, confined close air in the evening, &c.,—it continues in health and bloom. Thus, this *stove* plant appears to be semi-hardy ; and being of ready culture, growing well in a mixture of sandy loam two parts, old decayed wood-earth and leaf-soil each one part, it merits general culture and attention. In Loudon's "*Hortus Britannicus*" it stands as an under-shrub of the stove, growing two feet high, with yellow flowers : introduced from Brazil in 1825.

Dec. 7th, 1833.

G. I. T.

ARTICLE III.—*Interesting Remarks on British Ferns,* No. I. By M.

The beautiful tribe of plants has until lately obtained but little attention from those who pursue the study of Botany merely as a relaxation, or as imparting additional interest to a residence in the country. One reason has been that the Ferns, as well as the other orders of the Cryptogamous class, present greater difficulties to the botanical student from the nature of their fructification than most other classes ; and another obstacle has arisen from the circumstance, that the terms used in defining the Ferns were so vague and scientific—botanists themselves differed so widely in the names they assigned to them, that how was the student to decide "when doctors disagreed ?"

But the progress made in the science of Botany has extended even to the formidable 24th class, each order of which has in its turn received elucidation, while microscopic observation has detected the mystery of their reproduction. The seed of the Ferns,

though very evident by the aid of a microscope, is so minute, that it was formerly considered invisible, or "only to be discovered at the precise hour of the night on which St. JOHN the Baptist was born"; while superstition invested it with the power of rendering its possessor himself invisible. SHAKSPEARE, and other poets of the "olden time," allude to this :

" We steal as in a castle, cock sure :

" We have the receipt for fern-seed—

" We walk invisible." SHAKSPEARE.

" I'll seek the shaggy fern-clad hill,

" And watch, 'mid murmurs, muttering stern,

" The seed departing from the fern,

" Ere wakeful demons can convey

" The wonder-working charm away." LEYDEN.

But though the investigations of science have stripped the Ferns of their magic influence, they have acquired far higher attractions ; and it is to our countryman, the late Sir J. E. SMITH, that we are indebted for an arrangement which greatly facilitates their classification : and the elegance and variety of their forms, and minuteness and beauty of their structure, will amply repay a little trouble bestowed upon their investigation. They also present another inducement to those who are fond of collecting and preserving botanical specimens : for while the gayer daughters of Flora lose much of their beauty of form and brilliancy of colour when preserved in the Hortus Siccus, these retain both, and are not subject to the attacks of those insects that frequently commit devastation in the Herbarium.

To the gardener I would plead, that the British Ferns would occupy and ornament those shady nooks and banks in his demesne, that are shunned by the brighter denizens of the parterre, while the numerous and beautiful species of foreign ones would diversify the collections of his stove and greenhouse.

If you consider the subject worthy a place in your pages, I will send a few hints upon the cultivation of Ferns, as well as some remarks upon SMITH's arrangement of the British species ; and I offer the foregoing observations in the hope that some of your correspondents may favour us with *their* practical suggestions upon the cultivation and propagation of Ferns, both those of our own country and the beautiful strangers from warmer climes.

M.

ARTICLE IV.—*On the Culture and Propagation of Plants, arranged according to the Natural System.*

No. I. By Mr. F. F. ASHFORD.

I have for some time past fostered the intention of commencing a series of communications on the propagation and cultivation of plants arranged according to the natural system, but until now have been deterred from so doing by private and unforeseen events. To the practical man they may probably be of but little use, but to the rising generation of young gardeners, and those persons who take delight in watching Flora in all her stages, from the vegetating of the seed to the maturation of the fruit,—to this class of persons they may be of some utility in the management of plants committed to their care; and if you think they merit insertion in the valuable pages of the *Floricultural Cabinet*, they are entirely at your service, and shall be followed up by others as opportunity permits.

As the great Author of the Universe created nothing in vain, surely he must be an unconscious observer of nature that does not discover in every walk, and every where, the goodness of an all-wise Providence in clothing the fields with verdure and the earth with beauties innumerable, for the support of animated nature—all tending to the advancement of our thoughts to that Being who created them.

I do not propose taking the orders as they are placed in the system, but to notice those first that are the most extensive, or containing genera most worthy of notice: commencing, therefore, with the order of Leguminosæ, ranking the 67th in the system of Jussieu, not only being the most numerous in genera and species, but one of the most useful to mankind.

Leguminous plants are immediately recognised by their papilionaceous flowers in a large number, pods and pinnate leaves constituting the remainder. As objects of ornament, many are possessed of unrivalled beauty: for example—among hardy flowering trees, the Robinia and Laburnum; for the flower-garden borders, the various species of the Cytisus, Caragana, &c.; among hardy climbers, the far-famed Glycinias of China and North America, with the herbaceous Vicia and Lathyrus; and lastly, among hardy herbaceous plants, the genera of Lupinus and Astragalus.

Great, however, as is the beauty that can brave the inclemencies of Northern Europe, they must give way to the beauty and elegance of their brethren of the Tropics. The flowers of the *Erythrina* are of the deepest crimson, and borne on some of the loftiest trees of the forest. The *Bauhinias*, with their snake-like stems and twin leaves, hang in festoons of flowers from branch to branch of other trees, and are only rivalled by the less vigorous and elegant, but more richly coloured, blossoms of the *Carpopogons*. But all these, with their broad heavy foliage and gaudy colours, are far surpassed by the rugged trunks, trembling airy foliage, and golden flowers of the *Acacias*. While the forests of hot countries are thus indebted to *Leguminosæ* for their timber, the meadows and pastures of the same latitudes are enamelled with myriads of *Hedysarums* and others too numerous to recite: even the gayest part of the scenery of Britain is indebted, in many respects, to the yellow flowers of *Spartium* and *Ulex*.

The arrangement of this tribe of plants is attended with much difficulty. By LINNÆUS and others, the number of genera was much smaller than those admitted by botanists of the present age: many additions have been made since the discovery of New Holland, and a large number of sub-divisions in old genera have been from time to time introduced by different authors. To combine these scattered improvements under one head, has been attempted by M. DECANVILLE, whose system is here adopted. He divides *Leguminosæ* into two grand divisions—the first, named *Curvembriæ*, consisting of plants the radicle of whose seed is carried back upon the edge of the cotyledons; and the second called *Rectembriæ*, whose radicle and cotyledons are straight. In the former, certain diversities in the structure of the calyx and corolla again divide into two principal forms—*Papilionaceæ*, comprehending all the genera with butterfly-shaped flowers; and *Swartzieæ*, consisting of an obscurely lobed calyx, and corollas with one, two, or more petals. This last is not again divided, but the former resolve themselves into two great tribes—those with fleshy cotyledons and eatable pulse, *Sarcolobæ*; and those with foliaceous cotyledons and seeds which are not eatable, *Thyolobæ*. Each of these is divisible by three. In *Rectembriæ* two suborders are formed, *Mimosæ* and *Cæsalpineæ*, upon variations in the æstivation of the calyx and corolla. In the former it is valvate; in the latter imbric-

cate. The first constitute a single tribe; the last divide into three, distinguished by less momentous peculiarities of structure. Having premised so far, the following table will be intelligible :

ORD. LEGUMINOSÆ, GEN. 246, SP. 2517.

1. CURVEMBRIÆ, gen. 194, sp. 1930.

a Papilionacæ.

- | | | |
|--|---|--|
| A. Phyllolobæ.
Gen. 149,
sp. 1483. | { | Tribe 1. Sophoræ. Pod continuous. Stamens distinct. Gen. 31, sp. 190. |
| | | Tribe 2. Lotæ. Pod continuous; stamens united by filaments. Gen. 85, sp. 1058. |
| | | Tribe 3. Hedysaræ. Pods with transverse articulations; stamens mostly united by the filaments. Gen. 32, sp. 234. |
| B. Sarcolobæ.
Gen. 45,
sp. 447. | { | Tribe 4. Vicieæ. Pod polyspermous, detriscent; leaves cirrhous, the first alternate. Gen. 9, sp. 181. |
| | | Tribe 5. Phaseoleæ. Pod polyspermous, detriscent; leaves not cirrhous, the first opposite. Gen. 29, sp. 227. |
| | | Tribe 6. Dalbergiæ. Pod one or two seeded, indetriscent; leaves not cirrhous. Gen. 7, sp. 39. |

b Swartziæ...Tribe 7. Swartziæ. Gen. 2, sp. 4.

2. RECTEMBRIÆ, gen. 50, sp. 583.

a Mimosa....Tribe 8. Mimosæ. Gen. 12, sp. 236.

- | | | |
|-----------------------------------|---|--|
| b Cæsalpinziæ.
Gen. 41,
sp. | { | Tribe 9. Geoffræ. Sepals and petals intricate in æstivation; stamens variously connected by filaments. Gen. 6, sp. 11. |
| | | Tribe 10. Cassiæ. Sepals and petals intricate in æstivation; stamens distinct. Gen. 31, sp. 235. |
| | | Tribe 11. Detariæ. Sepals before expansion indistinct; calyx bladder-like. Gen. 1, sp. 1. |

Having thus given, at one view, a tabular explanation of the sub-orders and their divisions and sub-divisions of this immense order, I think it will be loss of time and waste of paper to add a list of the generic names, which will appear at the description of each genus.

Div. 1, Curvembriæ. Sub-order 1, Papilionacæ. Sub-div. 1, Phyllolobæ. Tribe 1, Sophoræ. Genera 1, Anagyris, or Bean Trefoil. Class 10, order 1, species 3. Le bois puant, Fr.; Der stinkbaum, Ger. Small shrubs of not very hardy growth, and very often killed back in severe winters. It is therefore best to protect them by means of hoops and mats, or in cold frames, where they will survive. Increased by layers, seeds, or cuttings of young wood. Anagyris, so named by TOURNEFORT, from Ana, backward—gyros, a circle; alluding to the pods being curved inwards.

Genera 2. Aotus. Class 10, order 1, species 3. Small evergreen shrubs with yellow flowers, from New Holland, and thrives best in an equal mixture of loam and peat. Increased by young cuttings planted in sand under a bell glass, and seeds when pro-

duced. Aotus, named by Sir J. E. SMITH, from a, privative or wanting—ous, an ear; in allusion to the want of appendages to the calyx.

Genera 3. Baptisia. C. 10, or. 1, sp. 9. Herbaceous plants of easy cultivation, and as ornamental border flowers, which will succeed well in any tolerably good soil. They sometimes ripen seeds, by which they are easily raised, and also increased by dividing the roots. *B. perfoliata* being a native of Carolina, should be kept in the greenhouse. Baptisia, from bapto, to dye, alluding to the blue tincture that is extracted from the leaves of some species; named by VENTENAT.

Genera 4. Brachysema. C. 10, or. 1, sp. 2. Handsome climbers for a conservatory, thriving well in an equal mixture of sandy loam and peat, and readily increased by layers, seeds, or by cuttings planted under a hand-glass in sand, which will root freely. Brachysema, named by BROWN, from brachys, short—sema, a standard; from the standard or vexillum of the flower being very short.

Genera 5. Burtonia. C. 10, or. 1, sp. 3. A genus from New Holland, which, as SWEET observes in the *Botanical Cabinet*, 251, requires more than ordinary treatment to keep it in good health. An equal mixture of very sandy loam and peat is the most suitable soil, the pots well drained with potsherds, that the water may pass off freely, as nothing is more injurious than to be sodden with too much water. Young cuttings are not difficult to root, planted in sand under a bell-glass; it may also be raised from seeds, which are sometimes produced.

Nov. 20th, 1833.

F. F. ASHFORD.

ARTICLE V.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.* By ST. PATRICK.

(CONTINUED FROM PAGE 10.)

NAMES.	DESCRIPTION.
127 Bonito.....	Light purple and pink.
128 Bonne Generaire	Lilac blush.
129 Boquet charmaute	Small pretty light purple.
130 ——— royale.....	Bright purple.
131 Boule pourpre	Dark purple globe.
132 ——— rouge	Fine globe scarlet.

NAMES.	DESCRIPTION.
133 Bracelet d'Amour	Small pale blush.
134 Brown Superb	Light blush crimson, very splendid
135 Brui Klean	Crimson.
136 Buonaparte	Very brilliant red.
137 Burning	Light red, very bright.
138 Burning coal	Bright red, very double.
139 Cæsar	Fine crimson blush.
140 Camille Bohlin	Bright scarlet, curled.
141 Candide	Fine large crimson.
142 Candidus	Small rich purple.
143 Capricorne	Fine curled double deep red.
144 Cardon bleu	Large double blue purple.
145 Carlo dolci	Good purple and scarlet.
146 Carnation	Fine striped.
147 Carnea	Beautiful flesh colour.
148 Cassivellanus	Bright red, very large.
149 Catelle	Semi-double red.
150 Celeste	Pale blush.
151 Celestial	Semi-double light blush.
152 Celestine	Bright deep blush.
153 Cent Feuille d'Oricule	Deep red.
154 ——— Platte	Large bright pink.
155 Ceries curla	Deep pink, pretty.
156 Cerotris	Double purple.
157 Champion	Curled scarlet and pink.
158 Champion, Fiery	Large red.
159 Chapron	Bright deep crimson velvet.
160 ——— rouge	Fine rich crimson.
161 Charles Auguste	Very splendid large double pink.
162 Charles the First	Large double red.
163 Charles the Second	Fine bright pink, in clusters.
164 Charlotte de la Charme	Large pale blush.
165 ——— Rousseau	Semi-dble. bright scarlet in clusters.
166 Charmante de Montrieul	Variegated light pink.
167 ——— Ecossaise	Beautiful deep blush.
168 ——— Irlandaise	Bright crimson.
169 ——— Pivoine	Bright blush scarlet.
170 Chrysolora	Large deep purple.
171 Cicero	Light and dark purple, very curious.
172 Claudius Cassius	Light crimson and blush.
173 Claire	Small transparent pink.
174 Clara	Close pale blush.
175 Clarisse	Fine scarlet and purple.
176 Clemantine	Large blush.
177 Clementia	New, reddish blue.
178 Cleonise	Beautiful blush.
179 Concarde	Fine deep blush.
180 Copenhagen	Fine deep scarlet.
181 Cordon Pourpre	Fine purple.
182 ——— rouge	Deep red.
183 Coronation Nouveau	Immense large purple.
184 Corvisar	Deep scarlet, tinged with purple.
185 Couleur dufen alumnant	Fine red and purple striped.
186 Countess d'Albemarle	Semi-double red and purple.
187 Countess of Munster	Fine large scarlet and light blush.
188 Craulatum	Beautiful pink blush.
189 Cramoisi	Beautiful shaded scarlet.
190 Cramoisi royale	Fine crimson, tinged with light blush, very splendid.
191 Cristata	Light purple, tinged with crimson.

NAMES.	DESCRIPTION.
192 Crown.....	Double red.
193 Cumberland	Fine pale pink and purple.
194 Cupid.....	Small blush.
195 Dageraad nouveau	Large fine crimson.
196 Damas boquet	Light blush, in clusters.
197 ——— unique	Deep velvet purple.
198 Daragon.....	Light red.
199 Dauphinoise	New. The best dark purple.
200 Decomets	Bright blush.
201 Decora	Fine mottled purple.
202 De France	Very fine white.
203 Dejaniee.....	Large deep lilac blush.
204 De la porte	Light purple.
205 Delice.....	Fine deep scarlet tinged with purple.
206 Deliceosa	Pale red.
207 Delphine	Fine double dark purple.
208 Diana.....	Cream colour.
209 D'Italie	Large bright deep pink.
210 Dominante	Light crimson.
211 Don Baltazer.....	Small blood red.
212 ——— Pedro.....	Pink, mottled with crimson.
213 ——— Quichotte	Bright dazzling scarlet velvet, semi-double.
214 ——— Var.....	Lilac turning pale.
215 D'Otieul.....	Small blush.
216 Double Musk.....	White.
217 ——— Sweet Briar	Light pink.
218 Duc d'Angouleme	Fine cream colour.
219 ——— de Brabant.....	Very double bright red.
220 ——— Bordeaux	Fine mottled pink.
221 ———, New	Blush.
222 ——— Grouchie	Semi-double, large blush.
223 ——— Guiche	Large bright red.
224 ——— Lerme ..	Purplish crimson.
225 ——— Malmaison ..	Fine bright red.
226 ——— Penhiere	Fine red.
227 ——— Wellington	Fine large deep scarlet.
228 Duchesse d'Angouleme	Beautiful brilliant red.
229 ——— de Bordeaux	Large fine bright scarlet.
230 ——— Normandie	Light lilac.
231 Duchess of Kent	Large cherry red.
232 ——— Oldenbourg	Light red.
233 ——— Parma.....	Crimson purple.
234 ——— Rutland	Blazing pink blush.
235 Dufay.....	Light bright red.
236 Duke of Devonshire	Small scarlet, mottled with purple.
237 Du Luxembourg	Deep red.
238 ——— Pape.....	Small bright red.
239 Earl Grey	Light pale red.
240 Elentheria	Scarlet and pink.
241 Elize d'Otieul	Crimson.
242 Emilius	Small pink blush.
243 Emmicus	Fine mottled purple.
244 Empress of Russia.	Light purple.
245 Enfants de Crave ..	Fine large double deep pink.
246 Enfant de France	Bright scarlet, very double.
247 Enforbia.....	Curled red.
248 Entreprise	Good pink.
249 Erasmus d'Oviedo.....	Small pink, semi-double.

NAMES.	DESCRIPTION.
250 Escarlata admirable	Beautiful curled scarlet.
251 Etna	Fine crimson blush.
252 Eucharis	Fine purple tinged with blue.
253 Eucres nouvelle	Pretty lilac.
254 Eugene d'Orleans	Small white, evergreen.
255 Eveque	Changeable purple and scarlet.
256 Exornatum	Dark and light purple.
257 Fabrice	Pink with white spots.
258 Fairly Cunningham	Fine scarlet, tinged with purplish blue.
259 Falcata	Purple.
260 Fanny	Dark purple.
261 — Bease	Fine large pink.
262 Fatine	Curled red.
263 Favourite des Dames	Large blush.
264 Felicite perpetuelle	Pale pink, in clusters.
265 Ferocite	Fine purple.
266 Feux nouveau de Beauman	Fine light purple and red.
267 Flambeau ante	Small scarlet.
268 Flava charmante	Large scarlet.
269 — pourpres	Very large purple.
270 Flemish Mottled	Fine large semi-double red.
271 Fleur de Parade	Light pink.
272 Flora fantasio	Fine curled pink.
273 — perfecta	Dark and light blue purple.
274 Florida	Semi-double scarlet.
275 — nouve	Semi-double deep purple and red.
276 Friolette	Semi-double light purple.
277 French Glory of the Gardens	Fine blue purple.
278 — rose de quatre saisons	Semi-double light red.
279 Galinnira	Mottled white.
280 Galliga	Fine large scarlet.
281 — nouva	Fine bright blush.
282 Gaufree	Fine deep mottled purple.
283 Gay	Fine bright pink.
284 General Blucher	Small purple, in clusters.
285 — du Roc	Very large deep red.
286 — Gourgoux	Large pale red.
287 — Thiare	Fine small dark purple, in clusters.
288 — Valmore	Purplish blood red.
289 George the Fourth	Rich large purplish crimson.
290 Geunniar	Fine red.
291 Gil Blas	Large pink.
292 — Peres	Dark crimson, tinged with purple.
293 Glacoe	Fine scarlet and pink.
294 Gladiator	Beautiful crimson and purple.
295 Globe, white hip	Beautiful white globe.
296 Gloire de Pourpre	Changeable purple.
297 — des jardins	Purple and dark scarlet.
298 — du Peuple	Semi double scarlet purple.
299 Gloria Mundi	Pale reddish pink.
300 Gocona	Pink.

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

REVIEWS.

A Catalogue of Flower Roots, Plants, &c. for 1834: comprising Ranunculuses, Tulips, Geraniums, Carnations, Picotees, Pinks, Dahlias, and Pansies. Grown by the Rev. Jos. Tyso & Son, Wallingford, Berks.

THE Catalogue is greatly enlarged, having received a considerable addition of new varieties of Ranunculuses, Tulips, Carnations, &c. &c. (See v. I. p. 17.)

EXTRACTS.

Plants figured in the following Periodicals for January:—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Rhododendron arboreum*, var. *album*. Tree Rhododendron; white-flowered variety. Synonym, *R. album*. Decandria, Monogynia. Ericæ. This beautiful variety of the Tree Rhododendron, flowered in great perfection in the Conservatory of ROBERT BAXTER, Esq. Dee Hills, near Chester, in February, 1831. It was raised from seeds sent by Dr. WALLICH to Mr. SHEPHERD, of Liverpool, about twenty years ago. In the List of Plants of the Hon. the East India Company's Museum, Dr. WALLICH gives this plant as a native of the high mountains of Nepal, where he gathered it in 1821. Dr. HAMILTON appears to have first discovered the plant on a mountain at Narainhatti, in 1803. It flowered for the first time in Europe, in Mr. BAXTER's collection. Rhododendron, from Rhodo, a rose; and dendron, a tree.

2. *Tradescantia pilosa*, Hairy Spiderwort. Hexandria, Monogynia. Commelinæ. Roots of this plant were sent by Dr. DRUMMOND, from Louisiana, to the Glasgow Botanic Garden, where it flowered during the autumn of 1833. Stem grows two to three feet high. Flowers numerous in terminal umbels, of a bright purplish blue, with yellow showy anthers. Culture—it requires the same treatment as the common border *T. Virginica*, from which plant it differs by having extremely hairy leaves. *Tradescantia*, from Mr. JOHN TRADESCANT, Gardener to CHARLES I.

3. *Lobelia puberula*; Blue downy Lobelia variety. Syn. *Lobelia puberula*, var. *glabella*. Pentandria, Monogynia. Lobeliaceæ. This is a highly interesting addition to our Garden Lobelias, and was introduced last year by Mr. DRUMMOND, who sent the seeds from Jacksonville, in Louisiana. The species appears, indeed, to be little known even to the American Botanists, and is probably confined to the Southern States. Its nearest affinity is perhaps with *L. siphilitica*, but its spike is less dense, and vastly more elongated, its flowers smaller, of a brighter purplish yellow, with two white spots on the lower divisions of the corolla. The spike rises about a foot high. Culture—The plant is perennial, and increased by division. *Lobelia*, from M. LOBEL, a celebrated botanist.

4. *Opuntia Brasiliensis*; Brazilian Prickly Pear. Icosandria, Monogynia, Cactaceæ. The peculiar habit and mode of growth at once distinguish this species. It rises with a perfectly straight, erect, slender, but firm and stiff round stem, to a height of from ten to twenty, or even thirty feet, very gradually tapering to a point, furnished all the way up with short, mostly horizontal or declining branches. The whole plant resembles a straight taper pole, artificially dressed up with branches. The main stem is perfectly round. The flowers open in long succession, being abundantly produced all over the plant from the prominent parts of the edges of the terminal joints. They are of a bright lemon yellow, middle-sized. The fruit is rather agreeable, juicy, with a fine acid, somewhat resembling an indifferent, hard fleshed, or unripe Plum, with a smell and slight flavour like the leaf stalks of Garden Rhubarb. Opuntia, from Opus, a city of Locris.

5. *Libertia formosa*; beautiful Libertia. Triandria, Monogynia. Irideæ. This species flowered beautifully in Mr. CUNNINGHAM'S Nursery, at Comely Bank, Edinburgh, in May, having been received from Mr. Low, of Clapton Nursery, who raised it from seeds imported from near the Southern extremity of the continent of America by Mr. ANDERSON. Its root forms a number of crowns, by which it no doubt may be propagated, and it probably will ripen seeds in the greenhouse. Stem, one foot four inches high. Flowers, numerous, in a capitate head, they expand in succession, white.

6. *Helianthus speciosus*. Showy Mexican Sun Flower. Syngenesia, Frutranæa. Compositæ. Division, Helianthææ. THOMAS GLOVER, Esq. of Manchester, states, Mr. EDWARD LEEDS, of this place, who has lately commenced business as a Nurseryman and Florist, from among a packet of seeds from the Botanic Garden, Mexico, sent by W. HIGSON, Esq. of Manchester, has raised several plants that are not known in this neighbourhood. Only one, (the above named plant) has flowered. Only one seed vegetated, and the title upon the paper was *Composita speciosa*, and it is said to come from Jorulla. The plant with Mr. LEEDS, rose to the height of about five feet, beset with branches very thickly all the way from the bottom to the top, the lower ones projecting nearly horizontally from the plant about 18 inches long, the rest gradually decreasing in length up to the top, and forming a complete cone, each lateral shoot producing a flower at its termination, and inclining upwards. Flowers of a deep orange, about three inches in diameter. (We suppose the plant is annual.—Cond.) Helianthus, from Helios, sun; anthos, flower—resemblance of flowers.

7. *Cleome dendroides*. Tree-like Cleome. Syn. C. arborea. C. atro-purpurea. Hexandria, Monogynia. Capparideæ. Though the colour of the flowers is rather singular than brilliant, this is a very striking plant, with its curious candelabrum-like, flower-spike, and handsome foliage. It was raised from seeds imported in 1828, from the Brazils, by Mrs. PENFOLD, of the Achada. For the first two years, this Cleome has quite the appearance of an annual or biennial herbaceous plant; rising with a single erect stem, to the height of from one to two or three feet, and producing, in the summer of the second year, a single, terminal spike of flowers. But after this, it puts forth one or two branches below the first spike, and the stem becomes more woody, brown and decidedly shrubby, attaining in this state five feet high, and lasts from four to five years. Flowers, large and singular in form, of a dark, dull, atro-purpureous colour, fœtid, with the very unpleasant smell of cabbage-water. Cleome, from Kleio, to shut.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Esq.,
Professor of Botany in the London University. Coloured,
4s.; plain, 3s.

1. *Amaryllis Kermesina*; Carmine Amaryllis. Mr. W. B. BOOTH, gardener to Sir CHARLES LEMON, of Carclew, in Cornwall, states, "Roots of this pretty

species of *Amaryllis* were brought from Brazil, in the early part of 1833, by Lieutenant HOLLAND, of the Royal Marines, who presented them to Miss STREET, of Penryn. It appears next to *A. advena*, and *intermedia*, but is perfectly distinct from either flowers. Scape grows a foot high, flowers pedicelled, three or four in number; pedicels round and slender, from two to three inches in length. Perianthium about 2½ inches long, funnel shaped, slightly campanulate, of a deep carmine colour, marked with darker veins. Culture—Thrives well in a mixture of loam, peat, and sand. It has hitherto been kept in a warm Vinery. *Amaryllis*, from a nymph of VIRGIL'S.

2. *Hesperocórdum líctum*. Milk-white *Hesperocordum*. Hexandria Monogynia, Asphodeleæ. This plant was found by Mr. DOUGLAS in California, whence its roots were sent to the Horticultural Society in 1833; the plant bloomed in July. It proves a hardy perennial plant, of but little beauty. Flowers, numerous in each umbel, white. They appear very much like some white flowered *Allium*. It seems to grow freely in any sort of soil. *Hesperocordum*, literally "onion of the west;" so named from its resemblance to an *Allium*, and its origin in the western world.

3. *Limnócharis Humboldtii*. Humboldt's *Limnocharis*. Syn. *Stratiotes nymphæoides*. Polyandria Polygynia. Butumæ. An Aquatic Stove Plant, originally found by HUMBOLDT in Marshes, the West of Caraccas; but it seems common over all the east side of South America. The seeds from which the plants in the Gardens were raised, were sent to the Botanic Garden, Liverpool, from Buenos Ayres. The flowers are very fugitive, opening in the morning, and withering up in the course of the day. They are of a bright yellow colour, much resembling the well known *Escholtzia californica*. The petals are extremely transparent and delicate; but the chief beauty of the species resides in the rich purple fringe of barren stamens which surrounds the fertile ones. It flowers all the year round in a tank in the stove. It is cultivated in Mr. LOWE'S Nursery, Clapton. *Limnocharis*, literally, Lake-lover.

4. *Paneratium pedale*, Long-flowered *Paneratium*. Syn. *Hymenocallis pedalis*. One of the most beautiful of the *Amaryllis* tribe, excelling them all in the extraordinary length of the flowers, which measure a foot from the base of the tube to the top of the segments. The latter are very narrow and wavy; the flowers are white. The bulb was sent by Mr. BARNARD from near Truxillo. Grown by RICHARD HARRISON, Esq. at Aighburgh. *Paneratium*, signifying "all powerful." It seems to have been originally applied to the squill, on account of its medicinal effects.

5. *Lupinus albifrons*. A new shrubby Californian Lupine. Flowers of a pale purple colour. Cultivated in the Garden of the London Horticultural Society. *Lupinus* (see page 16.)

6. *Helleborus odoratus*, Sweet Hellebore. Polyandria Polygynia. Ranunculaceæ. A very desirable addition to the scanty store of winter-blowing flowers, lately introduced from Hungary by the London Horticultural Society. The flowers are of a lively green colour, slightly fragrant. It thrives in a peat border among bushes, where it is probably quite hardy. *Helleborus*, the black Hellebore of the ancient Greeks, with which it is said that wells were sometimes poisoned, and which had so great a reputation as a dangerous medicine, was undoubtedly a species of the present genus.

7. *Corydalis bracteata*, Large bracted *Corydalis*. Syn. *Fumaria bracteata*. Diadelphia Hexandria. Fumariaceæ. A very pretty little hardy herbaceous plant, found abundantly in damp shady places among the Altai mountains, where it appears with the earliest flowers of spring. Flowers, of a clear yellow colour. In this country the plant succeeds well in a peaty soil, if it is sheltered from winds, and protected from the sun's direct rays. It is, however, as yet extremely rare, for it yields no seed, and increases very slowly by its roots. It is grown in the London Horticultural Society's Garden. *Corydalis*, from the Greek word *corudallis*, a lark; in allusion to the lengthened base of one of the petals, which has been compared to the spur of the lark.

8. *Francoa appendiculata*, Sowthistle-leaved *Francoa*. Syn. *F. sonchifolia*, Octandria Monogynia. Francoaceæ. A pretty herbaceous plant, found

abundantly in various parts of Chili, by the sides of hills and in rather moist situations. In this country it grows freely in the open air in the summer, but requires protection in the winter, it, however, thrives better if constantly kept in a greenhouse, especially if it be planted in the open soil, where it can be freely exposed to light and air, without which the beautiful spots of its petals are scarcely developed. It is propagated by seeds and offsets. Francoa. So called by Cavanilles after a Spanish botanist of the sixteenth century, named Francisco Francoa.

9. *Aster puniceus*; var demissus. Dwarf blue Aster. Syn. *A. amœnus*, *A. hispidus*. This variety has long been known in the English Gardens, and is one of the commonest and most generally known of all the North American species. Its tall *hisped racemose stem* will at once distinguish it from others that are generally met with. Flowers of a violet blue colour. It is a very compact herbaceous plant, not exceeding a foot and a half, or two feet in height. The flowers appear in August, long before those of the true. *A. puniceus*. It is among the handsomest of the genus. Aster, from a Star, resemblance of flowers.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s.; plain, 2s. 3d.

1. *Verbena sulphurea*. Sulphur-coloured Vervain. *Didymia Angiosperma*, *Verbenaceæ*. This pretty little Vervain was raised from Chilian seeds received from Mr. HUGH CUMING, by Mr. WILLIAM CHRISTY, Jun., in whose collection of plants at Clapham, it bloomed in August, 1833. The plant is apparently perennial, and forms a close spreading patch. It appears to prefer a loamy soil, and grows luxuriantly in the open border during Summer, but requires the protection of a pit in Winter. Cuttings of it root readily. In appearance, the growth and form of the plant is like *V. pulchella*. Flowers of a good sulphur colour. *Verbena*, from Ferfaen, its Celtic name.

2. *Adesmia uspalatensis*. Thorny. *Decandria Monogynia*. *Leguminosæ*. An upright, branched, thorny, shrub, seldom exceeding a foot in height. The plant is grown in the Chelsea Botanic Garden, seeds of it had been received from Mr. HUGH CUMING, having been collected in Chili. It is a very pretty little shrub, its small, abruptly pinnate leaflets, mostly in five pairs, with its rich yellow papilionaceous flowers, render it a desirable plant. The pods, when full grown, are particularly pretty, from the long feathery hairs with which they are adorned. The plant is foud of a light loamy soil, it requires protection in Winter, and may be increased by cuttings. *Adesma*, the name has reference to the separation of the stamens, and is compounded of a privative, and *desmos*, union.

3. *Francoa ramosa*; white-flowered. *Octandria*, *Monogynia*. *Francoaceæ*. This species grows abundantly on the hills near Valparaiso, in Chili. It has been collected by Mr. CUMING and Mr. BRIDGES. It blossomed in July, 1833, in the Nursery of Mr. KNIGHT, King's-road, Chelsea. The scape of flowers rises from 2 to 3 feet high, erect, and branched, flowers white, occasionally a very slight tinge of rose colour. The plant appears to thrive best in a mixture of sandy peat and loam, and is readily increased by seeds, which it perfects freely. Francoa, (see page 41.)

4. *Petromarula pinnata*, wing-leaved, Candiot Rampion. Syn. *Phyteuma pinnata*. *Rapunculus creticus*, *Petromarula*, *Rapunculo*, *Candiota*. *Pentandria*, *Monogynia*. *Campanullaceæ*. This remarkable plant is frequent on the rocky shores and mountainous parts of Candia, and also on Mount Baldo, in Italy. It is now cultivated in the very rich collection of Messrs. YOUNG, of Kpsom, where it blossomed in September, 1833; it was there planted in the open ground in May, in a rich loamy soil, where it grew vigorously, throwing up 40 to 50 stems, which began to blossom towards the end of August. Stems, erect, branched from 3 to 4 feet high, or more; branches long erect; Flowers fasciculate, disposed in very long, terminal, loose, spiked

racemes, of a pale azure blue. The plant requires the protection of a frame or greenhouse in winter. Increased slowly by division. *Petromarula*, from *petra*, a rock, and *maron*, an herb, from the plant growing on rocks.

The Botanical Cabinet. Edited by Messrs. LODDIGES'S. Coloured, 5s.; partly coloured, 2s. 6d.

This work is now completed. The Proprietors state that it was originally their intention to give figures of two thousand plants, which now being done, their work is completed.

The Botanic Garden. Edited by Mr. B. MAUND, F.L.S. Price 1s. 6d. large; 1s. small, coloured.

1. *Oxalis crenata*, notched-petalled Wood-Sorrell. Decandria, Pentagynia. Oxalideæ. This variety is a far more robust plant than any other of the genus; it is not on account of its flowers or herbage that it becomes an object of peculiar interest, but from its tuberous roots, which bear a great resemblance to those of the Potatoe, their form and colour being precisely similar to it. A native of Lima; introduced in 1829; grows to the height of three feet; perennial; flowers in July and September; colour yellow. In regard to the culture of this newly-introduced vegetable, very little knowledge has yet been acquired; but it will grow well in the open border, providing the soil is rich. *Oxalis*, from the Greek *Oxys*, signifying sour, taste of the leaves; *Crenata*, from the Latin, notched, in allusion to its flowers.—(*See Flo. Cab. Vol. I. plate 4, and page 45.*)

2. *Erica cinerea*, grey Heath. Octandria, Monogynia. Ericææ. This hardy British Heath is highly ornamental in the garden, and deserves general cultivation. There are several varieties, as deep crimson, pure white, and intermediate tints. It grows one foot high; flowers in July and September; native of Britain. *Erica*, from *Ereico*, to break, referring to the fragility of the branches; and *cinerea*, signifying ash coloured.

3. *Alstræmeria pelegria*, spotted flowered. Hexandria, Monogynia. Amyrillideæ. This plant has usually been treated as a greenhouse plant; it is, however, half hardy, requiring only the cold frame. If it be treated as a border plant, the situation should be warm and dry, and the soil made very light with leaf mould, sand, and the sifted mortar rubbish of an old building. Flowers rosy white, spotted with black; the stems grow one foot high; blooms from June to September, and is a perennial plant. *Alstræmeria*, named by Linnaeus, in honour of Baron Alstræmaer, who sent him seeds from Spain. *Pelegria* is its common name in Pern, which signifies a superb flower.

4. *Aconitum versicolor*, Shaded Monk's Hood. Polyandria, Trigynia. Ranunculaceæ. This species is of upright growth, and its flowers are ornamental, it grows three feet high, flowers in July and August; is a perennial border plant. The flowers are blue and white. All the species of *Aconitum*'s are poisonous. *Aconitum*, from the Greek *acon*, signifying a dart, because its poison was used upon darts, to render them the more deadly.

SOOT destroys or drives off from pink beds those common and voracious grubs of gardens, the larvæ of the moths of the family Noctuidæ.—Last summer I was troubled with the grub in a bed of pinks: I then made some soot water, and with it watered the bed well, and the bed was soon freed from the grubs. The precise mode of the soot's action on the grubs I cannot state; but I believe that the ammoniacal matter which it contains destroys some, and disperses the remainder. I shall gladly receive any information on this head. I have not found the soot injure the soil at all; and I name this because I had been told it would.—W. DENYER, *Gard. Mag.*

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

QUERY TO THE REV. JOSEPH TYSO, ON RAISING *RANUNCULUSES*.—Allow me through the medium of your excellent work, to ask my good friend the Rev. J. Tyso, who has been and still is one of the most successful growers of that beautiful Florist's flower the *Ranunculus*, to inform the lovers of that flower of his method of raising seedlings. He is well aware that the day is gone by for keeping anything secret that is for the pleasure or happiness of our fellow-creatures. Will he be so kind as to answer the following queries, in as plain and familiar a manner as possible.

1. To name a few of the best flowers in each class to be impregnated?
2. The kind of flowers proper for the work of impregnation, whether single or semi-double?
3. The time most proper to perform the work of impregnation, with the manner of performing it?
4. The future management of the flower impregnated?
5. The best time for gathering and sowing the seed, with the compost in which it is to be sown, and whether it is best to sow it in *pans* or *boxes*?
6. The best plan of preserving the roots till the planting season?

I should not have taken the liberty I have, if I had not known something of the kind disposition of my good friend; and shall wait with no small degree of impatience for his reply to my queries,

Now that I feel an inclination for scribbling, I wish to ask you the best situation and soil for the *Weeping Willow*, as I have succeeded in striking a cutting given me by a friend who took it from the tree that grows and spreads its sweeping branches o'er the tomb of

"Him who rode war's fiery billows
Once, and ruled their surges wild,
Now beneath Helena's willows
Sleepeth—like a child!
All his soaring spirit flown,
Napoleon! Napoleon!"

In his grave the warrior sleepeth,
Humbly laid, and half forgot,
And nought, besides the willow, weepeth
O'er that silent spot!

Calm it is, and all his own,
Napoleon! Napoleon!"

My plant is about fourteen or fifteen inches high, with about five or six slender branches bending weepingly from the stem. I intend, as speedily as possible, to increase my stock, when (if you have no objection) I shall feel pleasure in presenting you with a plant.—[We shall esteem it a favour.—CONDUCTOR.]

Like our good friend REVELL, I certainly feel a considerable portion of incredulity relative to the size of "INNOVATOR's" Pinks. I have for years grown that beautiful flower, but never to the perfection spoken of by your Correspondent. My blooms were universally admired, and took the first pan; but I should think the largest did not exceed six inches, which was taken from "*William of Wakworth*." I hope that, in order all scepticism may be banished from the mind, INNOVATOR will at an early period give us an account of his plan, with the names of the sorts he grows.

Leicester, Dec. 12th, 1833.

SAML. WIGG.

ON PINKS, CARNATIONS, &c.—Will INNOVATOR inform me whether any of the Pinks “one foot in circumference” can be seen next year within ten miles of London, and their names. I must confess a Pink four inches across (which of course it must be to be a foot round) is new to me. Last July, at Hogg’s, a friend of mine measured a Carnation, which was so much larger than the others on his stage as to be on that account peculiarly conspicuous, and found it to be four inches and three quarters across, and I think no other there could have been more than four inches. But when we hear of Pinks of that size, Carnations may be grown by INNOVATOR probably eight inches in diameter. At all events he will, perhaps, favour us with his standard size for Carnations. With regard to piping, I tried Mr. REVELL’s plan this year late, (for my first pipings failed), and I struck every piping under a large hand-glass, except one. I am much indebted to him for communicating it. What does INNOVATOR mean by saying, that by the mode he recommends Mr. REVELL may strike *one hundred and fifty out of every one hundred? Surely that can only be done in Ireland.* B. M.

London, Dec. 2d, 1833.

ON DESTROYING THE WIRE-WORM, &c.—Can you or any of your respected Correspondents inform me of the best method of destroying the small black snail, and wire-worm, which do so much injury in our gardens? I have tried lime, which kills them, but have always thought it to do more harm to the plants than the destroying of the vermin did good.

Jan. 3d, 1834.

E. R. W.

ON RHODODENDRONS, &c.—I should feel much obliged by being informed, through the medium of the *Cabinet*, which are the best and handsomest sorts of Rhododendrons and Azaleas for green-house culture.

Dec. 9th, 1833.

S. C. A.

ON THE CULTURE OF BRUGMANSIA.—I should be much obliged if some of the readers of the *Cabinet* would give a paper on the treatment suitable to the Brugmansia Arborea, both as a dwarf, or a tall cultivated plant, so as to bloom it well, whether in the house or open air.

Jan. 4th, 1834.

MARTIN.

ON PINKS, POMEGRANATES, &c.—I should be particularly obliged if you or any of your numerous Correspondents would give me some information on the culture of a Pink named “Davey’s Eclipse;” with me the edges of the petals become uneven instead of the contrary! Also the best method of producing in the *open air*, flowers of the Double Pomegranate, in the *shortest* possible period.

W. D.

Beverley, Dec. 13th, 1833.

ANSWERS.

ON THE SIZES OF POTS, &c.—In reply to the query of a Subscriber, inserted at page 21, we beg to observe that there are eleven sizes usually sold. The price is the same for all the sorts, viz. two of the largest cost the same price as eighty of the smallest. The following scale gives the distinguishing sizes in inches, as requested by our Correspondent:—

			In. dr.	In. dp.
1st size, has	2	to the cast, called Twos, and are	18	and 18
2d.....	4	.....Fours.....	12	.... 12
3d.....	6	.....Sixes.....	9	.... 8
4th.....	8	.....Eights.....	8	.... 7
5th.....	12	.....Twelves.....	7	.... 6
6th.....	16	.....Sixteens.....	6	.... 7
7th.....	24	.....Twenty-fours.....	5	.... 6
8th.....	32	.....Thirty-twos.....	4	.... 6
9th.....	48	.....Forty-eights.....	3	.... 4
10th.....	60	.....Sixties.....	2	.... 2½
11th.....	80	.....Eighties, or thumbs.....	1½	.... 2

ANSWER TO S. A. H., RESPECTING TULIPS.—The reason why bulbs are taken up every year, appears to be in order to accommodate them as nearly as possible to their natural state. In most hot countries the variation of seasons gives them a period of rest, during which the bulb is in a dry inactive state. Tulips, if left all the year in the ground, degenerate and become foul, the beautiful stripes and feathered markings become suffused, and the bulbs “break into small increase;” or, as my friend Mr. T. K. SHORT (to whom I am under peculiar obligations,) says of Hyacinths, “produce nothing but off-sets.” If the Tulips S. A. H. mentions, were originally good, i. e. fine *roses*, *byblomens*, and *bizards*, they may probably be brought back to their original state, by taking up the bulbs at the usual time and well harvesting them. I should then recommend that a different bed be prepared for them, at the greatest distance possible from the one they now occupy. The new bed should be made of good fresh loam, or at least good garden mould without dung, and this should be at least two feet deep. If, however, the Tulips be really bad, or only common border flowers, any trouble bestowed on them will be labour lost.

SNOWDROP.

November, 1833.

ON A DWARF YELLOW FLOWERING PLANT.—In reply to the query of AMICUS, in the November number of Vol. I. of your truly interesting, useful, and cheap publication, I beg to say, that I think the Winter Helebre would suit his purpose for a yellow, and the *Helleborus niger*, or Christmas Rose, for a rose-coloured flower; they both grow from three to six inches high. I have grown them with success in a stiffish soil, that has been broken with decayed leaves and decayed wood.

Jan. 3d, 1834.

E. R. W.

[We suppose our Correspondent means by Winter Helebre the *Eranthis hyemalis*, common Winter Aconite; this plant flowers from January to April—the Christmas Rose, *Helleborus niger*, from January to March. Of course either would have to be replaced after that period, by some other plant which would continue to the end of the year.—CONDUCTOR.]

REMARKS.

TULIPS.—Wishing to purchase a few tulips, I procured the catalogues of the present year, from two of the most eminent florists, BROWN, of Slough, and GROOM, of Walworth. On comparing them, I was much surprised at the great disparity of prices of many of the bulbs, and as this is a matter of importance to all purchasers, it may be generally useful to know the reason of this very great difference in the price of the same bulbs. I have selected a few with the prices, and find there is a difference in the two columns of upwards of £40.

	Brown.			Groom.		
	L.	S.	D.	L.	S.	D.
Agamemnon, bz.	3	3	0	0	2	6
Bolivar, bz.	3	3	0	4	4	0
Catafalque, Dutch, bz.	2	2	0	1	10	0
Duke of Clarence, bz.	1	1	0	0	15	0
Fabuis, bz.	5	5	0	8	8	0
Gresdelin, Jewl. by. b.	1	1	0	0	5	0
Leonardo da Vinci, bz.	10	10	0	5	5	0
Othello, by. b.	3	3	0	9	15	0
Parmegians, byb.	21	0	0	50	0	0
Prince Wm. IV. ro.	0	10	6	0	5	0
Rose Camusa de Craix,	5	5	0	6	6	0
Shakspeare, bz.	15	15	0	21	0	0
Sulphurea, bz.	3	3	0	2	2	0
Ulypes, bz.	5	5	0	4	4	0
Walworth, ro.	0	10	6	0	15	0
Warsaw, bz.	10	10	0	15	15	0

In Brown's Catalogue, “La Pulcelli de Dort,” a byblomen, is marked One Guinea, and in the same Catalogue “Pucelle de Dort,” a byblomen is marked Half a Guinea. Are not these the same flowers?

SNOWDROP.

November, 1833.

ON THE PROPERTIES OF THE PINK.—1. The stem should be strong, elastic, and erect, and not less than twelve inches high.

2. The flower should not be less than two inches and a half in diameter; the petals should be large, broad, and substantial, and free from large, coarse, deep notches, or indentures; in short, they approach nearest to perfection when they are rose-leaved, i. e. without any fringe at all.

3. The broad end of the petals should be perfectly white and distinct from the eye, unless it be a laced pink, which should be bold, clean, and distinct, leaving a considerable portion of white in the centre, perfectly free from any tinge or spot.

4. The eye should consist of a bright rich dark crimson or purple, resembling velvet; but the nearer it approaches to black, the more it is esteemed; its proportion should be about equal to that of the white, that it may neither appear too large nor too small.

REMARKS BY PANSY.—Having been a subscriber and well-wisher to the *Floricultural Cabinet* from its commencement, I see with satisfaction the progressive improvement in this cheap and useful little work. I hope you will continue occasionally to favour your readers with the characteristic marks by which we may know some of the most popular flowers, in the manner you have described the Carnation at page 187, Vol. I., as it is no less strange than true, that many of the admirers of the Dahlia are unacquainted with the points required to form a perfect flower. A proof of this was lately given at one of the local Horticultural Meetings not far from town, where, after the examination was over, and the prizes awarded, it was discovered that some of the gardeners (who had selected flowers from their master's garden for the show) had unluckily left the *best specimens* in the anti-room, and when pointed out by a good judge, it was too late to rectify the error!—I am glad to observe you purpose issuing another Edition with the plates better coloured; not that I think there is just reason to complain at present, considering the price of the work. By the bye, it would be well, if possible, to avoid changing the names of new flowers, as it too often occasions offence and disappointment. The *Nierembergia* has had three several names since it was first introduced—first, *Salpiglossis*; second, *Petunia integrifolia*.—I shall be impatient to see your valuable correspondent's promised paper on the cultivation of the *Salpiglossis*, and only regret that he seems inclined to confine it to the greenhouse, knowing from two years' experience that few flowers delight more in the open ground, where at this moment I have a bed containing seven varieties, all sparkling in the sun, and I trust will continue to do so until the end of the month, if not longer.—Will you pardon me, Mr. Editor, for saying, that you would act wisely to give only one article in any Number on the same flower. "One at a time, they will last the longer;" and you know that "variety is charming."—One word more of advice, and I have done for the present. It is, I think, *bad taste* to allow any sparring, or the use of hard names, between correspondents, to sully your floral pages; and you may safely venture to believe, that no one will complain if you apply the *pruning knife* pretty freely on any future occasion, before you go to press. Surely the chief object in contributing *ought* to be to afford information, and, as far as possible, aid and encourage you in the conduct of a work, in which you have shown such zeal and ability.—I hope soon to be able to furnish you with *Flora's Dial*, *Calendar*, and *Barometer*, for the amusement of your fair readers, and remain, yours, &c.

PANSY.

The Grove, Oct. 8th, 1833.

[We shall be obliged by receiving the promised favours at an early convenience.—CONDUCTOR.]

ON DAHLIAS.—Observing you sometimes give descriptions of new Dahlias in your *Floricultural Cabinet*, I send you a notice of two or three raised in the neighbourhood of Sevenoaks, Kent, viz. :—

Beauty of Surrey, a white, prettily tipped and tinged with rose colour, feathering into fine filaments towards the middle of the petals; a very fair formed middling sized flower, the petals rather pointed, growing about three feet and a half high, showing the flowers well above the foliage. This is a seed-

ling of last year's, and first sent out this spring; raised by Mr. HARDINGE, Gardener, Sydenham, Kent.

Guttata Major, spotted variety, raised by the same person, and first sent out this spring; a large well formed white, very prettily spotted with purple towards the end of the petals, which are well rounded, sometimes much more spotted than at others, growing about four and a half feet; flowers a little pendant.

Seale's Invincible, (striped variety), a most beautiful this year's seedling, not yet sent out; raised by Mr. W. SEALE, jun. Gardener, Sevenoaks, Kent. Rich dark maroon at the edges of the petals, with a broad bright crimson stripe up the centre, grows about four and a half feet; flowers erect, well shown above the foliage; a perfect double flower, bearing none otherwise; a free bloomer, beginning to blow when about 18 inches high, and continuing in good bloom the whole season; considered by many eminent growers the best stripe known.

These three are well worth the attention of those who wish for the new varieties of these flowers, though I am fearful I have not given a very scientific description; but being very fond of descriptions of new and good flowers, as also where they are procurable, I thought some of your readers might be the same. If you think it worth insertion, it is much at your service; if not, I pray you throw it amongst the rejected addresses.

7th Dec. 1833.

AN ARDENT ADMIRER OF GOOD FLOWERS.

FANCY FLOWER BORDER.—I lately saw (a novelty to me) in a little flower garden in the front of a house on the Marine Parade, at Dover, which pleased me much. The situation is very exposed, and the soil rather chalky and unsightly. To remedy these evils, the border had been covered with moss, much of which was in a growing state; and the effect of the flowers growing out of the moss was very pretty; and at the same time, the surface of the bed was kept in a state favourable to the growth of the plants, which was very evident from their appearance. The flower gardens of Dover and the neighbourhood are kept in very neat order.

SNOWDROP.

November, 1833.

REFERENCE TO PLATE.

1. *Gilia aggregata*. Tufted-flowered *Gilia*. Synonyms. *Gilia pulchella*, *Cantua aggregata*, *Ipomopsis elegans*. This plant is a native of the north-west coast of America, whence it was introduced to the garden of the London Horticultural Society, by Mr. DOUGLAS, in 1827. On a careful comparison of the native sample in *Pursh's Herbarium*, collected by Captain LEWIS at Hungry Creek in 1806, which although but partially developed, and more copiously clothed with hairs than the cultivated ones, we are satisfied that there cannot be a doubt as to the identity of the two plants. It appears to delight in a loamy soil, and is increased by seeds. When in blossom, few plants of this family surpass it in beauty. It is very nearly allied to *Gilia coronopifolia*, but differs in its more copious pubescence, and in the narrower, concave, acuminate segments of its corolla. It is cultivated by Mr. KNIGHT, of Chelsea Nursery. It keeps in bloom for several months, beginning in June. The plant is biennial, but will bloom the first season, as well as the second.

2. *Calandrinia grandiflora*. Great-flowered *Polyandria Monogynia*. Portulacæ. A beautiful succulent kind of plant, introduced by Mr. M'RAE in 1826 to the garden of the London Horticultural Society, from Chile. It is a handsome herbaceous plant, very suitable for flower borders, or to compose a single bed. The plant grows from eighteen inches to two feet high. It is propagated very readily from seeds, which are produced abundantly; also by dividing the plant towards autumn. It blooms from June to October; requires a warm sunny situation, and a rich sandy loam; the old plant wants winter protection. Plants or seeds may be obtained at most of the public nursery establishments. *Calandrinia*, so named after J. L. CALANDRINI, a Genevese botanist.

3. *Lady Haggerston Pink*. A very good Florist Pink. Grown extensively by the late Mr. DAVEY, Florist, King's Road, Chelsea.

4. *Calceolaria formosum*. Handsome Calceolaria. There are two varieties which are known by this name; the one here figured is the original kind, and much handsomer than its rival. The present variety is something narrower in the shape of its flower than the other, but its colours are much deeper, and far more clear and distinct. To avoid future confusion, we suggest the propriety of calling the kind here figured, *formosissimus*.

FLORICULTURAL CALENDAR FOR FEBRUARY.

PLANT STOVE.—If there be severe weather, fires will be required every night, and probably in the day. The plants should be kept perfectly free from dust, &c. which otherwise would lodge upon the stems, branches, and foliage, let it be immediately washed off by syringing or sponging; this will very much conduce to the health of the plants. They must also be kept free from decayed leaves. Water of the same temperature as the house should always be used. Let all plants become dry before a fresh supply is given; and when applied, as much given as is likely just to moisten all the soil. Succulents will require care so as not to rot them off; better be too dry than otherwise. It is essential that the surface of the soil be frequently stirred, never allowing it to bind or become mossy. Fresh air must be admitted in all sunny weather.

GREENHOUSE.—This department should have good attendance during this month, similar in its operations to those directed in January, which see.—Oranges, Lemons, and Myrtles will require water frequently, they usually absorb much. The herbaceous kind of plants will require occasional waterings, but less frequent and in less quantities than the woody kinds. Succulents, as Aloes, Sedums, &c. should be watered very sparingly, and only when the soil is very dry. Air should be admitted at all times when the weather is favourable, or the plants cannot be kept in a healthy state. If any of the Orange, Lemon, or Myrtle Trees, &c. have naked, or irregular heads, towards the end of the month, if fine mild weather occur, begin to reclaim them to some uniformity, by shortening the branches and head shoots, by this attention they will break out new shoots upon the old wood and form a regular head; they should also be repotted in rich compost, reducing the old ball of earth carefully, and replacing with new soil. After sifting it would be of great use to the plants, if the convenience of a glass case could be had, in which to make a dung bed, that the pots might be plunged in, this would cause the plants to shoot vigorously, both at the roots and tops; cleanliness (as directed for the Stove.)

PLEASURE GROUND, FLOWER GARDEN, &c.—Towards the end of the month it will be time to sow most of the tender and curious kind of Annuals, which require the aid of a hot bed to bring them forward for early blooming. Sow also the Week Stocks and Mignonette, both for flower borders, and to bloom in pots for rooms. Plant and regulate where required all kinds of perennial roots and herbaceous plants, disposing them so as to be regularly intermixed. Fork and dress over the beds, and add fresh soil. Dress and add fresh compost to the Auricula plants; defend the plants from frost and heavy rain, as the flower stems will begin to appear, but admit all possible air on mild days, or the stems will be weakened. Auricula and Polyanthus seed must now be sown in boxes, using light rich soil. Transplant Carnation layers into large pots or borders, towards the end of the month. Defend Hyacinth, Ranunculus, and Tulip beds from severe frost (if such occur) by means of hoops and canvass or mats. Finish pruning flowering shrubs, evergreens, &c. Transplant also. Turf may be laid. Plant Box Edging, &c. Dahlia roots should now be potted, and seeds sown. Lobelia roots should be divided and potted singly in rich soil. Tigridia pavonia roots should be potted in rich soil.

F. F. A.

EMILY TULIP



Cornus capitata



J & J. Parz.

THE
FLORICULTURAL CABINET,

MARCH 1st, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Carnation and Picotee.* By INNOVATOR.

I herewith send for insertion in your *Cabinet*, what I have found (after numerous experiments) to be the best method of growing those beautiful flowers, the Carnation and Picotee.

I shall begin with the first purchase. This ought to be made the first week in October; and in doing this, be cautious where you lay out your money, as I am certain there are no other articles in which so much roguery and deception are practiced as in Carnations and Picotees; you had better pay a little more to a florist of standing character than risk being cheated by the allurements of cheapness. I would also recommend your attending the removal of the layers from the parent plant where possible, and go home with them directly, and pot them in 48-sized pots, in the following compost:—One barrowful each of rather sandy maiden loam and thoroughly decayed hot-bed dung, with a peck each of coarse sand and leaf mould, all well mixed together and passed through a fine sieve; put in the bottom of each pot a quantity of potsherds, then fill to within two inches or so with the compost, and upon this place the plants, and place the compost lightly round them up to the first pair of leaves; strike the pot once upon the potting board, and give them water. When they are become dry, place a hand-light firmly over them for a week or ten days, by which time they

will have pushed fresh root, and be able to stand the open air. My reason for advising the removal to be made by yourself is, that they may not be exposed to the air for three or four days after they are taken from the old plant, and before they are sent to you. This is a common practice with knavish florists, that they may engender the disease complained of by your Correspondent IRIS, viz. their dying when near blooming. This exposure to the air causes every piece of grass then upon the plant to wither and die, and to stick so firm to the main stem that it is impossible to remove it without injury to the bark of the stem, where the water gets in after every watering, and produces decay just above the earth, and ultimately death. The next is the wintering your plants; this is generally done in common glazed frames. Having chosen a warm south aspect, place your frame upon four bricks, one at each corner, along the ends and middle; in the inside lay a row of bricks, and upon these splines of inch deal, three inches broad, and the length of the frame; set your pots upon these, and give them all the dry fresh air possible, by keeping the lights off during the day; when wet, raise the frame upon extra bricks; do this also after you have given them six or eight hours' gentle rain; if it should not clear up so soon as you expected, the air passing in under the frame will soon dry them, or possibly they might remain wet for three or four days, which would certainly produce mildew and unsoundness. In severe frosty weather shut down the frame close, and cover with mats at night. Give no water whilst it continues. Keep them in this situation till the last week in March. A week before you pot them into their flowering pots, expose them night and day to the open air; this will harden them to meet the transplanting, which should now be done. The compost I have found the most suitable is as follows:—10 barrowfuls of well rotted flag, dug from an old pasture, two years before use, where the soil is what farmers call heavy; five barrowfuls of well decayed old cucumber bed; one barrowful of coarse sand, and one barrowful of finely ground unburnt sulphate of lime (Gypsum); this last tends greatly to invigorate their growth, and causes the white to be beautifully clear. These should be put together in October, and turned frequently during frost in winter. About the last week in February put it under cover, that it may get moderately dry before use. The flowering pots should be 16 to the caste (sixteens). Over

the hole in the bottom of each lay an oyster-shell, and upon this an inch thick of fresh horse-droppings; then fill with the compost till the ball of earth, with the plants placed in centre of the pot, are about an inch below the rim; fill up with compost; strike the pot smartly once or twice upon the board, and water them; place the pots upon the stage, or along the walks, upon boards laid upon bricks to keep out worms. About the beginning of June they will require sticking with round sticks four feet long thrust into the middle of the pot; to these tie the flower-stem with loose collars of wet bass. Cut off all the flower-buds but one or two as soon as they appear. About this time some plants will wither and droop as if dying. I see Mr. REVELL attributes this to growing them too strong in their winter station; such I can from minute observation assure him is not the cause; it proceeds from there being worms in the pots; these destroy its fertility, and render the soil acid. The cure is easy: water them three times a week with lime-water for a fortnight or so, and they will quickly recover. I had this season a plant of Walmsley's William the Fourth in this state; I gave it the lime-water, and I afterwards won the first prize with its bloom. About the latter end of July, the buds will require girding. This is best done by narrow slips of bladder put two or three times round the pod; when wet with gum-water they dry and become firmly attached. When they are in full bloom, they require cording and shading by means of an awning. As soon as the flowers begin to fade, commence layering. I need not enter into this, it is too well understood; but when well rooted, proceed as recommended at the beginning of this article. I should advise young Florists not to seek variety, but to confine themselves to five or six pair of each of the best sorts, particularly if they compete for prizes. I am, perhaps, one of the largest Amateur growers in the kingdom, having about 325 sorts, and near 1500 plants; I can say what no others can, that I have shewn for several seasons, and have (with one exception) taken the first prizes. I must apologize for the length of this, but I have found it impossible to compress it into a smaller compass.

INNOVATOR.

You shall hear from me again. [We shall esteem it a favour.—
CONDUCTOR.]

ARTICLE II.—*On the Culture of Salpiglossises.* By
MR. THOMAS APPLEBY, Gardener to the Rev. J. A.
RHODES, Horsforth-Hall, near Leeds.

For the information of such of your readers as may be desirous of cultivating this singularly beautiful family of plants, I now, agreeably to a former promise, send you an account of a method practised here, which is perfectly satisfactory to me.

Some time in March I sow the seed, covering it about one-eighth of an inch, in wide-mouthed and hollow pots, well drained, in a compost of light yellow loam and heath mould in equal parts, adding about one-sixth of fine white sand, and place them on a shelf close to the glass in the stove, (a cucumber bed might do, but on account of the damp there, I prefer the stove,) watering with a fine syringe, so as to keep the soil just moist. As soon as they have four leaves each, I pot them into sixties, one in each, in the same compost, only adding a little fine vegetable mould, taking care to drain well with broken pots about the size of peas. I place them again on the shelf before mentioned, shading them until they can bear the light without flagging.

As the plants advance in growth they are potted into larger pots four times. I flower them in pots about six inches wide and eight deep. To cause them to flower strong, I remove them after the third potting into a cold frame, facing the south, and on all fine days expose them, by drawing off the lights, to the full air and sun. This makes them grow stiff and bushy. When the greenhouse plants are removed into their summer situation, I give the Salpiglossises their last potting, and take them into the greenhouse, giving every day plenty of air, and I find they flower much finer for the previous exposure.

Salpiglossises will grow and flower in the garden in a satisfactory manner, provided they are planted out from the pots about the 1st of June, in rich dry soil, and a sheltered situation; but in my opinion, and my success bears me out, the situation to shew them to the greatest advantage, is in the greenhouse amongst Cockscombs, Balsams, Triverania coccinea, and some species of Gloxinia. There they will flower admirably, and with proper management produce seed in abundance.

I usually sow a little seed in September, for the purpose of

having a few early flowering plants. They require to be kept through the winter in the stove, close to the glass, in small pots' and then managed as to soil, potting, &c. as the spring-sown plants, and they flower finely in April, May, and June.

I think too rich soil very injurious : the plants often take the pet, and die off by the roots, in it. I have frequently seen plants with fine healthy leaves and flowers, dying gradually upwards. I cannot account for this disease, excepting by the soil being too rich.

To be certain to procure seed from *Salpiglossis atropurpurea* and *Barclayana*, it is necessary to impregnate them artificially; whilst *picta*, *straminea*, and their varieties, seed freely without any care. Upon examination, however, this apparently strange circumstance may be easily accounted for : the pistil in those species is considerably elongated, and the stigma on its summit is of a curious boat-like shape; and as the flowers stand quite erect, the pollen falls to the ground without effecting its office, unless by chance some friendly insect assist in the business, which whatever it may do in their native situation, is not to be expected in our greenhouses.

Out of doors seed is not to be had, at least I never could obtain any; but perhaps in the south of Britain, seed may be procured in the open air.

By impregnating with different sorts, I find they sport into various and beautiful shades of colour and size; and I have no doubt many sorts will run one into another, which satisfies me that most of the kinds now ranking as species, will have to be reduced to mere varieties.

THOS. APPLEBY.

Jan. 2, 1834.

ARTICLE III.—*On the Cultivation of British Ferns.*

No. II. By M.

Having now more than thirty species of British Ferns growing healthfully in the open ground, I would suggest the following method, which I have practised, to those who wish to form a collection of this interesting tribe.

Without remarking on the ornamental disposition of the ground, the first thing to be considered is, having the bed in which it is

purposed to grow the Ferns elevated above the level of the surface of the ground, and giving a perfect drainage to the water from it. If the soil be sandy and light, a few stones at the bottom of the mound or bed will be sufficient ; but if on a strong, loamy, or retentive soil, I would place a layer of loose stones to the height of eighteen inches, taking care that all superfluous moisture should have a free drainage from the bottom. Upon the stones I would place pieces of bog earth, not chopped small, to the depth of eight or ten inches : then an equal thickness of heath mould, or sand and light soil mixed ; and then a layer of bog earth mixed with sand. When heath mould and bog earth cannot be procured, sand and good mould may be substituted, mixing with the upper layer some leaf mould, instead of the bog earth ; this I have found to answer remarkably well. No clay or strong loam must be used for the generality of the larger Ferns, such as *Aspidium dilatatum*, *Asp. aculeatum*, *Filix fœmina*, &c. ; but for the smaller species, such as *Asplenium Ruta-muraria*, *Scolopendrium Ceterach*, or *Aspl. Trichomanes*, pieces of some light porous stone, (the Derbyshire Tufa is the best,) should be placed for the roots to shoot amongst, and but little soil is needed amongst the stones. After all the care in preparing the soil and planting the Ferns, but little success will be attained without *shade*, and the *cooler* the situation the better ; for though *stagnant* water is very prejudicial to them, they will bear and enjoy a great deal of moisture, provided the soil is such as to admit of its draining away.

The *Ophioglossum vulgatum*, or Adder's Tongue, is somewhat impatient of removal, and thrives better in its natural situation in grassy meadows, than in any to which I have transplanted it.

I shall be glad if these observations occasion others from your Correspondents, upon the Cryptogamia, and the habitats of British Ferns ; they will be desirable information to all who are anxious to collect or cultivate so interesting a class.

In my next paper, I will add a list of the localities of those I have gathered.

Feb. 4.

M.

ARTICLE IV.—*On the Culture of Dutch Bulbs in Pots.*

By MR. F. F. ASHFORD.

Observing in Vol. I. page 242, of your valuable Monthly Periodical, that a Querist, Mr. J. B. DENTON, asks for a little information respecting the cultivation of Dutch Bulbs, in pots, requisite for their flowering freely, I sit down to the consideration of his request, and pen a few remarks, which upon receiving, if you deem worthy of admission into the pages of the *Cabinet*, they are entirely at your disposal. In my opinion, there are no plants that produce and expand their blossoms at the time when forced Dutch bulbs generally do, deserving of general cultivation, and a little extra trouble, more than this tribe of plants—Hyacinths, Tulips, Narcissuses, Crocuses, &c. of every hue and colour, of different heights (from three inches to two feet and two feet six inches high), and their blossoms so very odoriferous that they fully compensate for the care bestowed upon them by their cultivators. The method I propose to elucidate is not primarily my own (though one I shall follow), but Mr. F. GODALL's, Gardener at Rode Hall, Cheshire, which after a fair trial will be found efficient, and answer the expectation of every one.

After a sufficient quantity of bulbs have been procured from the nursery early in October, prepare them for potting by removing all the loose rind and offsets or side bulbs; at the same time care must be taken not to injure the bulbs in the least by so doing.

Compost.—This should be prepared the preceding winter, and consist of the following:—One barrowful of well decomposed hot-bed dung; one barrowful of vegetable leaf mould; two barrowfuls of fresh maiden loam; and a quarter of a barrowful of drift sand. These materials must be well chopped and mixed together and thrown into a heap, that the frost and atmosphere may decompose and pulverise the various substances that this mixture may contain; and about the middle of September convey it to a dry open shed, that it may become dry before using.

Potting.—The bulbs, after having been prepared as above, must be potted in the soil in pots proportioned to the size and sort of bulb. Fill the pots and shake the soil down well, but do not press it with the hand before commencing to plant the roots; then lay some sand on the top of the soil in the middle of the pot,

and placing the bulb on the top, gently, though firmly, press it down till within a quarter of an inch of the top. Care must be taken not to press with sufficient violence to injure the bulbs, yet it must be left firm in the pot, for on these two things much depends as to their future success. After they are potted, and named or numbered, place them in an old cucumber or melon frame, prepared after the following manner. Take out the soil, and lay upon the dung about two inches thick of ashes; level and make them very solid; on the top lay a quantity of sifted ashes, in which plunge the pots, making the ashes as firm round them as possible. When this is finished, cover the whole to the depth of eight or ten inches with light dry soil. Always choose a dry day for the purpose, and let every thing be dry that is used about plunging. Give air at all times, excepting in heavy rains, snows, or frosts, when the lights must be put on, and, if very severe, mats must be added.

In January take them out of the frame, wash the pots, convey them to the stove for flowering, supplying them with water at all times when required, and air when necessary, which will assist them in flowering strong. As the scapus, or flower stalks, advance in growth, tie them carefully, and not too tight up, to neat green or white sticks, with bass mat finely twisted. When the flowers begin to open, remove them to the conservatory or greenhouse, where they will almost turn dreary winter into gaudy summer by their delightful fragrance and varied appearance. Crocuses planted four or five in a pot, and treated as above, look exceedingly well when in flower.

If it is not convenient to make a compost purposely for them, as is sometimes the case, old cucumber soil may be used when made lighter or richer with dung or sand, according as it may require, and will answer very well. If Mr. DENTON will next season adopt the above method, no doubt but he will prove successful; and if Mr. D. wishes any further information respecting the culture of Dutch Bulbs in pots, I will with pleasure answer his queries through the medium of the *Cabinet*.

I subjoin a list of a few kinds which answer very well when treated as above.

HYACINTHS.—1. Henri de Prussie, double blue. 2. Alamode, double white. 3. Waterloo, double red. 4. Madame Zoutman, double red. 5. Groot Vorst, double red. 6. Ophir, double yellow.

7. Heroine, double yellow. 8. Boquet d'Orange, double yellow.
 9. Passetout, double yellow. 10. Sultan Achmet, double white.
 11. Grand Sultan, double blue. 12. Anna Maria, double white.
 13. Dido, double red.

NARCISSUSES.—1. Grand Primo, white. 2. Grand Monarque, white. 3. Double Roman, white. 4. Soliel d'Or, yellow. 5. Bazelman Major, white. 6. Bazelman Minor, white. 7. States General, white. 8. Juno, yellow.

TULIPS.—1. Duc van Thol. 2. Florentine. 3. Marriage de ma Fille. 4. Perfecta Parrot. Persian Irises, Jonquils and Crocuses of every colour, single and double.

Mr. DENTON's other requests shall be answered next month, and any other he chooses to propose.

F. F. ASHFORD

Somerford Booths, January 7th, 1834.

ARTICLE V.—*On the Cultivation of Gloxinia speciosa, G. caulescens, and G. maculata.* By Mr. W. MOUNTFORD.

The Gloxinias are plants that possess considerable beauty, and are particularly deserving of cultivation. The following is my practice. Some time during the summer, I take a quantity of leaves from each sort I wish to propagate, cutting them close off at the surface from the parent plant. I then prepare a quantity of pots, sixties, with a compost of loam, leaf mould, and peat soil, in equal parts, adding as much fine sand as will keep it perfectly open. I then insert a cutting (a leaf) in each pot, half an inch deep, pressing the soil pretty firm. After the whole is finished, I give a gentle watering from a fine syringe, and place them in a hot-bed frame, if I have one at work, or a stove, which is nearly as well. Water must now be given with great caution, for too much moisture would cause them to rot. I let them remain in the same pots, after the bulb is formed, until the period arrives for rest, which is easily known by the leaf gradually dying away. I then remove them to a dry cool place, taking care that they do not get much moisture during the winter. In the latter end of February, or beginning of March, I take all the pots of roots, and carefully shake all the mould from them, and then

pot the largest in forty-eights, and the small ones into sixty sized pots, taking care that they are well drained with broken potsherds. After the whole are potted, I give only sufficient water to settle the earth to the roots, and then place them in a warm part of the stove. As the plants advance in growth, and fill the pots with roots, I again remove them out of sixties into forty-eights, and those out of forty-eights into thirty-twos. Two or three times during the summer months, I find it very beneficial to water them with liquid manure. As soon as they begin to flower, I place them in the greenhouse amongst the plants, where they bloom profusely, and look very splendid. Nothing more is required but occasionally supplying with water. When they are become dormant, they are put by as before.

W. MOUNTFORD.

Warleigh Gardens, near Bath, Dec. 8, 1833.

ARTICLE VI.—*On the Deterioration of the Dahlia.*

By VERTUMNUS.

Many important engagements have prevented me sending you the few remarks I promised you, relative to the deterioration of the Dahlia, by the extensive system of propagation usually pursued.

My idea is, that in order to have a good bloom, it is necessary that plants raised from some of those shoots which first present themselves should be selected for planting. So far as I have had any opportunity of proving this idea, I am fully borne out in it. Two years ago I observed a plant of the Countess of Liverpool, in a first rate collection near London, of which nearly all the blooms were single; and, on inquiry, I found that the parties having numerous orders, had sold all their early plants, and had reserved the latter propagation for their own growth.

This season I saw three plants of the Queen of Yellows without a flower in the slightest degree multiple; and I discovered that the very same occurrence had taken place.

Further, a flower called Wood's Triumphant, which had been much admired two or three years ago, was rejected by many growers; and in a conversation I had with Mr. Wood, the original raiser of it, he told me he had himself rejected it, as it could not be relied on.

Now, this very flower went from me to several persons this last season, and has in every instance given great satisfaction, which I can only suppose has occurred from the fact, that having from the first had a large stock of it, I have never had occasion to work it so extensively as others have done.

As this is in a measure at least, after all, only conjecture, I must protest against such attacks as are made on several writers in your miscellany, as I conceive it is out of such conjectures, fairly argued, the truth will be elicited; and I believe it is an axiom generally acknowledged, that invective is a never-failing sign of a bad argument.

I will just observe to some inquirers about Levick's Incomparable, that I have seen several instances of success in developing the spots, by pulling off the self-coloured flowers immediately they show themselves to be such, when a course of tipped flowers generally succeeds them. At the same time, Mr. LEVICK is perfectly correct in his statement, that luxuriant plants are generally self-coloured: and, therefore, all manure should be avoided, at least until the plant shows itself to be in colour, when it may be applied at the top.

The luxuriant growth may be much retarded, by treading the ground round the plant very firm, if it begins to grow too freely.

So much for Dahlias: and now I beg to state to Mr. REVELL and INNOVATOR, that I have tried with success Mr. R.'s plan of puddling the soil in which I inserted my pipings of Pinks; I conceive the great loss frequently occurring is occasioned by the minute drops of moisture, which will, in spite of all efforts, remain in the hearts of the piping; by his plan the soil settles as closely as possible about them in a few hours, and the necessity of watering is avoided, which I consider a great advantage.

Mr. REVELL, however, may speedily convince himself that the Pink is to be grown exceeding *thirteen inches* in circumference, if he will try Tate's William the Fourth, a flower raised by Mr. TATE, near Islington Church, from the seed of Ford's Victory, I believe; which has, however, in my opinion at least, hardly any other property than its monstrous size to recommend it.

I conclude by congratulating you on the improvement in your work, which I much admire, and which I am happy to hear succeeds so well.

VERTUMNUS.

London, Dec. 11th, 1833.

ARTICLE VII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

(CONTINUED FROM PAGE 37.)

NAMES.	DESCRIPTION.
301 Gracilis	Small compact globe blush.
302 Grand dore	Dark crimson in clusters.
303 Grande Duchesse de Bruxelles.....	Fine bright red.
304 ——— Image	Semi-double pale red.
305 ——— Junon	Dark scarlet.
306 ——— Sophie	Maroon.
307 Grand George	Large deep red.
308 Grandidier.....	Purple.
309 Grand Monarque	Fine light purple.
310 ——— Pivaine	Pale red.
311 ——— pourpre dour.....	Fine mottled purple.
312 ——— Sowanof.....	Light purple.
313 ——— Sultan	Small deep blush.
314 ——— Triomphe de la ville.....	Light crimson, changing to pink.
315 ——— Turc	Large pale red.
316 Gros major	Bright pink.
317 Grosse Junon.....	Very pretty red.
318 Gurin.....	Semi-double light reddish purple.
319 Harpise	Light blush.
320 Helene	Close double purple, scarlet eye.
321 Henrico	Fine deep blush.
322 Henriette	Fine light purple.
323 Henry I.....	Light purplish crimson.
324 ——— III.....	Fine red.
325 ——— IV.....	Large beautiful double red.
326 ——— VIII.....	Beautiful scarlet.
327 Heri à fleur pleine.....	Rosy crimson.
328 Heroine noir	Dark purple, nearly black.
329 Hersilia	New, small semi-double blush.
330 Hessiose.....	Beautiful blush.
331 Hibrde du Bellage	Beautiful gay deep crims. scarlet.
332 ——— brunne	Pinkish purple.
333 ——— large	Light blush.
334 ——— Luxembourg	Very bright red.
335 ——— nouveau.....	Fine deep purple red.
336 ——— perfecta	Deep scarlet.
337 Hibrid perfecta	Very large velvet purple.
338 Hollandaise nouvelle	Beautiful kind of buff.
339 Holocirica nova	Bright scarlet and pink.
340 Honine	Bright red pink.
341 Hymenée	New, large fine blush.
342 ———	Striped light purple.

(TO BE CONTINUED.)

PART II.

EXTRACTS.

New and Rare Plants figured in the Periodicals for February.

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Ipomea rubro-cærulea*, Reddish-blue Ipomea. Pentandria, Monogynia. Convolvulaceæ. Of the genus *Ipomea*, as distinguished from *Convolvulus*, no less than 165 species are described by ROEMUR and SCHULTES. The species which compose it are chiefly inhabitants of the tropics, and remarkable for the beauty of their flowers, which, though they be individually short-lived, are succeeded so rapidly by others, that there are few more showy ornaments of the forests in warm countries, or of the stoves in our own. One species, *I. Jalapa*, yields the jalap of the shops; whilst another, the *I. Batatas*, or Sweet Potatoe, is an important article of food in the tropical countries, as the Potatoe is in Europe. The present species, *I. rubro-cærulea*, is grown in the stoves of JOHN ALLCARD, Esq. and Miss LOXLEY, of Stratford-Green, Essex. Seeds of it were collected in Mexico, and received in this country by J. D. POWLES, Esq. of Stamford-Hill, who liberally distributed them. Flower, in bud, white, with the limb of a rich lake red, which, when fully expanded, becomes of a fine purplish blue; the diameter of the corolla is about four inches, and altogether the flower is exceedingly handsome, meriting a place in every collection of stove plants. Culture: increased by cuttings or seeds. Soil: rich sandy loam. *Ipomea*, from *Ips*, bindweed; and *homois*, similar.

2. *Epidendrum nocturnum*, Night-smelling Epidendrum. Gynandria, Monandria. Orchidææ. This plant is a native of the West Indies, growing in this country in the Liverpool and Glasgow Botanic Gardens. The flowers are of a pale greenish yellow, uninteresting in appearance; they are scentless during the day, but at night yield a very powerful odour, resembling that of the White Lily. *Epidendrum*, from *Epi*, upon; and *dendron*, a tree—growing upon trees.

3. *Onopordium Arabicum*, Arabian Cotton Thistle. Syngenesia, Æqualis. Compositæ. A native of Arabia, also of the warmer parts of Europe. A plant was grown by Mr. MACKAY, at the Dublin College Botanic Garden, ten feet high, raised from seeds sent in 1832 from Buenos Ayres. It is a hardy biennial. Flowers: terminal, solitary, purple. Culture: increased by seeds; common, rich garden soil. *Onopordium*, from *Ono*, ass; and *perdo*, effects.

4. *Ceropegia Lushii*, Mr. LUSH's Ceropegia. Pentandria, Digynia. Asclepidææ. This plant was sent from Bombay to the Edinburgh Botanic Garden, where it flowered in October 1833. Flowers: yellow green, tinged with purple; uninteresting. *Ceropegia*, from *Keropegion*, a candelabrum, or lamp-stand, referring to the peculiar shape of the flowers.

5. *Opuntia cylindrica*, Round-stemmed Prickly Pear. Synonyms, *Cereus cylindricus*, *Cactus cylindricus*. Originally introduced into England in 1799, but has never flowered in this country. Flowers of an orange red, smallish. *Opuntia*, from *Opus*, a city of Liberia.

6. *Kentrophyllum arborescens*, Arborescent. Syn. *Carthamus arborescens*, *Carthamus rigidus*, *Onobroma arborescens*. Syngenesia, Æqualis. Compositæ. Raised by Mr. MACKAY, of the Dublin Botanic Garden, from seeds

sent from the South of Spain. It is a singular and very ornamental plant of its tribe; it has stood out of doors two winters, flowering freely in autumn. Both flowers and leaves have a musky smell. Flowers, yellow. *Kentrophyllum*, from *Kentros*, a spine; and *phyllon*, a leaf—in allusion to the spiny leaves.

7. *Chrysophyllum monopyrenum*, Date-shaped, or Damascene Plum, Star Apple. This species of Star Apple, which was introduced to the conservatories of Britain in 1812, forms in Madeira a rather elegant evergreen tree, growing about thirty feet high, with a trunk one foot in diameter. Leaves alternate, oval, approaching to oblong, four or five inches long, and two broad. Before they fall, the leaves turn to a beautiful deep rich red, variously marbled or mottled with yellow or white. The fruit is of a dark brown colour, insipid, yet not absolutely disagreeable, being tolerably juicy and sweet, with a fig-like flavour. Flowers, yellowish white, small. *Chrysophyllum*, from *Chrysos*, gold; and *phyllon*, leaf.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. 4s. coloured, 3s. plain.

1. *Calanthe densiflora*, Clustered Calanthe. Gynandria, Monandria. Orchidæ. A native of the mountains of Sylhet, whence it was obtained by Dr. WALLICH. It is cultivated by Messrs. LODDIGE's. The plant is a terrestrial species, growing very freely in loam and decayed vegetable matter in a damp stove. It is propagated by division of the crown of the roots. Flowers, in a dense, many-flowered corymb, pale yellow. *Calanthe*, from *Kalos*, beautiful; and *anthos*, flower.

2. *Gastrolobium retusum*, Blunt-leaved Gastrolobium. Decandria, Monogynia. Leguminosæ. A native of the south coast of New Holland, whence it was received by Mr. KNIGHT, of the King's Road, Chelsea, in whose nursery it is now cultivated. It is a smaller plant than the old but rare species, *G. bilobum*. Its flowers are of the same rich orange yellow, but in smaller heads; and their keel is not purple. It is a pretty greenhouse plant, easily propagated by cuttings. *Gastrolobium*, from *Gaster*, the abdomen; and *lobus*, a pod. It might be Englished Bladder-pod, the pods having an inflated appearance.

3. *Heliconia pulverulenta*, Powdered Heliconia. Pentandria, Monogynia. Musacæ. A beautiful stove plant, cultivated in the hothouse of Sir ABRAHAM HUME, Bart., at Wormleybury, in Herts, where it flowered in July 1833. It is impossible to imagine any thing more delicate than the blue bloom which thickly covers the under side of the leaves, or more brilliant than the vivid scarlet of the flower-leaves or spathes. It is probable this species is a native of some of the South American forests. Culture: soil, peat and loam; increased by division. *Heliconia*, from *Helicon*, mountain of the Muses—affinity to *Musa*.

4. *Nierembergia filicaulis*, Slender-stemmed. Pentandria, Monogynia. Solanæ. This new species is cultivated by Mr. TATE, of Sloane-street Nursery, Chelsea. It is probably a native of Mexico. It is a very pretty greenhouse plant, perennial. Flowers numerous, lilac with a yellow centre, one inch and a half diameter. It differs from *N. gracilis*, not only in the colour of its flowers, but also in being entirely destitute of the down found on all parts of that species. Culture: easily increased by cuttings, and requiring but a moderate degree of protection in winter, provided it is kept in an airy place; soil, rich sandy loam. *Nierembergia*, in honour of J. E. NIEREMBERG, a Spanish Jesuit, who is said to have written a Natural History, in sixteen books, of which nothing is now remembered.

5. *Viburnum cotinifolium*, Quince-leaved Wayfaring Tree. Syn. *V. polycarpon*. Pentandria, Monogynia. Caprifoliacæ. This rare plant is a shrub

with so much the appearance of *Viburnum Lantana*, our English Wayfaring Tree, that unless the flowers were seen, it would be judged a variety. The flowers are, however, much larger, more coloured with pink. It is a native of the mountains of Kamaon, one of the northern provinces of British India. The fruit it produces is eaten in its native country. *Viburnum*—the Latin word *vico* signifies to bind with twigs; and hence, they say, comes *Viburnum*, the shoots of which are used as withies.

6. *Oncidium altissimum*, Lofty *Oncidium*. Syn. *Epidendrum altissimum*, *Epidendrum gigas*. Gynandria, Monandria. Orchideæ. One of the most gigantic of epiphytes. It is described by RICHARD as frequently attaining the height of nine feet, with leaves as long, in its native woods in Guiana. Mr. HARRISON, near Liverpool, has grown a flower-stem upwards of ten feet long. The blossoms are beautifully marked with green, yellow, and scarlet, but are rather small, little more than one inch across; they are produced numerously. The plant is a native of most of the tropical parts of America. Many of the Orchideous epiphytes are found to succeed best if tied to short pieces of the branches of trees with rugged bark; none succeed better upon that plan than the different species of *Oncidium*; and provided so large a plant as the present species, with its long heavy leaves, can be made fast to a branch, we have no doubt it will also be found to like that kind of treatment. *Oncidium*, from *Ogkidion*, a tubercle—two prominences on the lip.

7. *Scotia lævis*, Smooth-branched. Decandria, Monogynia. Leguminosæ. A third species of the rare genus *Scotia*. It has been raised by Mr. KNIGHT, King's Road, Chelsea, from seeds gathered on the south coast of New Holland, by Mr. BAXTER. It is a delicate greenhouse plant, requiring a cool shelf in the winter, and abundant ventilation. The foliage is handsome, like some of the prettiest *Cassias*. Flowers, yellow. *Scotia*, in honour of Dr. SCOTT, Professor of Botany, Dublin.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s.; plain,
2s. 3d.

1. *Zappania nodiflora*; var. *rosea*. Pink-flowered Knotted Zappania. *Didymia*, *Angiospermia*. Verbenacæ. Synonyms, *Verbena nodiflora*, *Sherardia repens nodiflora*. This plant was introduced from Chile by Mr. CUMING, and is grown by Mr. KNIGHT, King's Road, Chelsea. It is perennial, creeping, forming a close patch, resembling a good deal in habit *Veronica officinalis*. When in flower it has a very pretty effect, being then adorned with innumerable heads of pink blossoms, marked with a yellow spot. It is tolerably hardy and highly ornamental, whether kept in a pot or planted in a rock work. Culture: a mixture of sandy peat and loam will be found to suit it well; it is easily increased by slips, for almost every branch is supplied with roots. *Zappania*, so named by SCOPOLIA, after PAUL ANTHONY ZAPPA, an Italian botanist.

2. *Fabago major*, Greater Bean Caper. Decandria, Monogynia. Zygophylleæ. Syn. *Zygophyllum Fabago*, *Fabago Belgarum*, *Capparis Fabaginea*, *C. portulacæ folia*, *C. leguminosæ*, *Telephium Dioscoridis*. This is an old inhabitant of our gardens, viz. from 1596, but still uncommon. It is a perennial plant, quite hardy, growing four feet high. Flowers: drooping, numerous, whitish and saffron; they are curious and pretty. Culture: it delights in a gravelly loam; increased by division and seeds. *Fabago*, from *Faba*, a bean—meaning a plant resembling a bean, which this does in its leaves.

3. *Calceolaria arachnoidea*; var. *refulgens*. Refulgent Slipperwort. *Dianthia*, *Monogynia*. *Scrophularinæ*. Tribe *Calceolariæ*. This very showy plant was raised by Mr. GILLEN, gardener to Mr. M'INTOSH, at the East India Docks, by cross impregnation with two of the numerous varieties originated

between *C. arachnoidea* and *corymbosa*. Mr. GILLEN has raised several others equally beautiful. The present variety grows about one foot high. Flowers: cymose, numerous, of a bright rufous red colour; the inner side of the corolla is whitish. It is a valuable addition to this deservedly esteemed genus. A light rich soil suits it best; increased by slips. *Calceolaria*, from *Calceolus*, a slipper—the form of corolla.

4. *Pericallis Tussilaginis*, Coltsfoot-leaved *Pericallis*. Syn. *Cineraria Tussilaginis*, *Senecio Tussilaginis*. Syngenesia, Polygamia, Superflua. Compositæ. An ornamental plant, native of Teneriffe, whence it was introduced, some years ago, by Mr. WEBB. It is usually regarded as an annual, but, if kept in the greenhouse during winter, it will survive several years. The stems rise about one foot high. The flowers are of a rich lilac on the upper side, and whitish beneath, in a numerous corymbose panicle. It is readily increased by seeds, and grows freely in any soil. *Pericallis*, from *Perikalles*, pretty—which alludes to the beautiful ray blossoms.

The Botanic Garden. Edited by Mr. B. MAUND, F.L.S. Price 1s. 6d. large; 1s. small, coloured.

1. *Lavatera triloba*, Three-lobed *Lavatera*. Monadelphia, Polyandria. Malvaceæ. A native of Spain, introduced in 1759. It is a hardy perennial, growing four feet high, and flowers in July and August. Flowers: rose-coloured. This plant will grow well in smoky districts. TOURNEFORT, the celebrated French botanist, adopted the name of this genus in honour of Dr. LAVATER, of Zurich.

2. *Lupinus ornatus*, Adorned Lupine. Monadelphia, Decandria. Leguminosæ. This species is a native of Columbia, and was sent by Mr. DOUGLAS to the London Horticultural Society. He found it growing abundantly in the vicinity of the river Columbia, in gravelly or light dry soils. He considered it one of the finest species. Flowers, sky-blue; leaves, silvery. [It is not equal to the polyphyllus, and many others.—CONDUCTOR.] The *Lupinus ornatus* does not increase much at the root, but it is readily increased by seeds. *Lupinus*, from *Lupus*, a wolf.

3. *Pyrethrum uliginosum*, Marsh Feverfew. Syngenesia, Superflua. Compositæ. A native of Hungary, growing three feet high, blooming from July to September. Flowers, white. The plant is perennial, and was introduced into this country in 1816. It spreads freely by underground shoots, and is readily increased. *Pyrethrum*, from *Pyr*, fire—in allusion to the hot tasted root.

4. *Linaria triornithophora*, Three Birds Bearing Toad-Flax. Didynamia, Angiospermia. Scrophularinæ. This plant has been long grown in this country, but is still rare. It is a native of Portugal, introduced here in 1710. It is a perennial plant, growing from two to three feet high, blooming from July to September. Flowers, of a crimson red, with a yellow mouth. Culture: in the latter part of summer, from its fibrous roots, a foot or more from the parent, spring up small young plants; these should be transplanted, or potted, to have protection in very severe weather, and in April be turned out into the borders. The term *Linaria* is deduced from *Linum*, just as *Toad-flax* is from *Flax*; *triornithophora*, from *treis*, three—*ornithos*, of a bird—and *phora*, carrying or bearing.

On the Culture of Cape Heaths.

(CONCLUDED FROM PAGE 15.)

"The soil most suitable for the cultivation of Cape Heaths, consists of a black sandy peat, that is naturally intermixed with about one-fourth of white sandy particles, which is frequently found on commons, where the common

Heath or Ling is growing; the top spit of which should not be taken off deeper than the soil appears of a free silicious texture. The turfy or sandy surface should be all carted along with it to the compost yard, and thrown up in a heap, to decompose and pulverize for two or three months—when the soil will be fit for use. The plants that have overgrown their pots, may be shifted into larger ones, any time from February to August, or otherwise, after they have done flowering, or previous to their coming into flower. If the operation be carefully performed, it is immaterial at what particular season. The balls of mould should not be reduced, and as few of the roots injured by it as possible, observing only to loosen the small fibres at the bottom and sides of the pots, which will induce them to strike freer into the fresh soil. There should, also, be plenty of drainage placed in the bottom of the pots, in order to carry off any superfluous moisture; and over the drainage a layer of the fibrous particles, sifted out of the soil, should be placed, which will also facilitate the carrying off the superabundant water.

“Mr. M^CNAB, in his valuable treatise on the General Treatment of the Cape Heaths, recommends to be mixed along with the soil, ‘a quantity of coarse free-stone, broken into pieces, from an inch to four or five inches in diameter; of those I always introduce a quantity among the fresh earth, as it is put in. This I consider of great advantage to all sorts of Heaths; but more particularly so to those that may have been shifted into a much larger pot or tub at once, than it had been grown in before, or in what I would call biennial, or triennial shifting.’

“The Heathery should have large portions of air admitted daily, to be only excluded in severe frosty weather, when the plants will require to be kept rather in a dry state, and but small portions of water given at once; they should be looked over daily, in case any of them are getting too dry, when a little water will be necessary. In mild weather, they will require to be more liberally supplied, and should have occasional syringings over their foliage; and as the season advances, this element must be more bountifully supplied, particularly in dry hot weather, when they should be syringed over head in the mornings and evenings, as well as large portions given at the roots.

“About the latter end of May, or beginning of June, the plants may be turned out of doors, and placed in a situation where they can have the benefit of the morning and evening sun, but sheltered from the westerly winds, and scorching effects of the sun’s rays, in the middle of the day; and arranged so as that a free circulation of air can readily pass amongst the whole collection, which will prevent their being drawn up in a weak or languid state, as is the case when crowded. The scarcer, and more delicate growing sorts, should be placed in a pit or frame, where they can also be shaded from the mid-day sun (by throwing a thin mat over the frame), and protected from heavy rains. If the autumn months are at all favourable, the plants may be left out of doors, until the middle or latter end of October, when they should be all cleaned and replaced in the Heath-house; but if the season is wet, they will require to be taken into the house earlier, in order that they may be protected from the heavy rains, which would saturate the soil about their roots, and be injurious to the plants. When the Heaths are taken into the Heathery or greenhouse, they should have as large a portion of air given to them as the house will admit of, both night and day, which should never be excluded, except in frosty or cold weather, when the Heathery should be shut up at night, but re-opened, if only for a couple of hours in the middle of the day.”

—*Hortus Woburnensis.*

On the Chemical Changes of the Sap of Trees.

The most important information which you will, I think, be able to give to the modern gardener, respects the chemical changes which take place in the sap of trees, and the motions of the sap at different periods of the year. That it descends in our trees through the bark (I exclude the Palm tribe generally) from the leaves, cannot be questioned, or that it ascends through

the alburnam into the leaf; but that a portion of the fluid, which has become true sap in the leaves, passes from the bark into the alburnam, and there joins the ascending current, and feeds the young shoots and leaves, is not generally understood by gardeners; nor that the fruit is fed by similar means; nor that the sap is deposited in the alburnam, to afford materials for leaves, or to feed the blossoms and young fruit of the succeeding spring. The coagulum which gives the matter of the new layer of bark in the spring is derived from the same source, though the arrangement of the vessels and fibrous texture of the bark is given by the fluid which descends by the bark.—T. A. KNIGHT, Esq.—*Gardener's Magazine*.

Evil Effects of Exposing Greenhouse Plants to the Open Air of Great Britain, &c.

The practice of turning greenhouse plants out of doors in summer may be necessary under particular circumstances, and with regard to certain species of plants; but, in cases where greenhouses are properly constructed, and solely devoted to the cultivation of plants, these will generally be found to be injured, rather than benefitted, by this treatment, particularly when turned out early in the season. Were it possible to manage greenhouse plants during the winter as it could be wished, and as they require, exposing them to the open air in summer would no doubt be highly beneficial to them; but in winter, fire heat being applied, a considerable degree of excitement is induced, and, before the season has arrived at which they can be safely exposed to the open air, they are all, or nearly all, in a state of vigorous growth. When at once removed to their summer quarters, the temperature at night is often so low that a complete check is given to the growth of the plants, from which they seldom recover till towards the approach of autumn; but, becoming injured to the open-air climate, they again make an effort to grow. From the gross habit which they have, however, now acquired, together with the lateness of the season, the shoots are seldom well matured, and the plants are unable to resist the effects of frost, mildew, damp, &c., by which greenhouse plants are liable to be injured. But when plants are retained under glass during summer, both first and second growths are ripened sufficiently early in the autumn; and unless very improper excitement be applied, they will remain in a state of comparative rest till the following spring, when their flowers will be both more perfect, and much more abundant, than such plants will produce as may have stood out the preceding summer.

In keeping them in the greenhouse, I do not recommend the plants to be kept crowded together the whole of summer. Duplicates, and the hardier kinds, may very properly be removed out of doors. During summer all possible air should be given day and night, except during long-continued rain, and the plants occasionally be syringed overhead with water, which may be done beneficially any hour of the day. I mention this, from having been myself sometimes cautioned never to wet the leaves of plants when the sun was shining upon them. When the roots of plants thus exposed to the sun can be preserved in a tolerably cool and moist state, their tops will not only bear the sun, but his full influence is indispensable to their health and vigour, and the full development of their flowers.

Orange trees, Camellias, &c., are liable to have their foliage injured by the sun, but this injury would seldom accrue to them were they retained in the house both summer and winter, and kept cool during the latter season, not applying fire heat till the temperature indicated three or four degrees of frost.—R. MARNOCK,—*Ibid*.

Method of Transplanting.

Small plants may be very neatly and safely transplanted from the borders,

by making narrow trenches round them, and filling such trenches with plaster of Paris, mixed with water to the consistence of a thick cream. This quickly becomes hard, and forms a pot, by which the plant may be taken up without disturbing its roots. With a little ingenuity, the soil and roots may be so encompassed, with the same material, as to greatly facilitate the safe removal of a choice plant to any reasonable distance.—*Maund's Botanic Garden.*

To destroy Ants.

The most effectual method of destroying ants that we have ever tried, is the use of the following mixture:—Take equal quantities of loaf sugar, arsenic, and finely powdered dried bread; rub them together in a mortar, till they are very well mixed. This should be kept in a bottle, in readiness for laying small quantities near their haunts. Great care is requisite in the use of this mixture, for it is injurious to vegetable as well as animal life.—*Ibid.*

Conditions favourable to the Growth and Flowering of the Rhododendron.

I am led to infer (observes the author) that, in all sheltered situations, where a moderate degree of shade is afforded, and where the soil is of a light sandy nature, the Rhododendron will grow and flower well, without any peat earth whatever; provided the ground is properly prepared, by trenching and breaking the surface, so that all the grass and vegetable matter be properly mixed. I deprecate the too general practise of pitting and planting without the ground being previously well trenched. It may be proper to state, that the Rhododendron is to be seen growing here very luxuriantly, in banks of very strong clay; in this case, after the ground had been well trenched and broken, I had pits made according to the size of the plants, and a portion of peat earth placed under and around each plant (say one or two barrowfuls, according to the size of the plants). Notwithstanding my having filled the pits with peat earth, I am satisfied that Rhododendrons, and other American plants of the same tribe, usually grown in peat, will grow and thrive even in clay, and perfectly well in loam, if it be trenched, and a portion of leaf-mould and of the scrapings of roads be mixed with it; the plants being planted in the neighbourhood of large trees, so as to be benefitted by their shade. I have planted American shrubs with success at all seasons, but prefer from the second week in August to the end of December; always taking advantage of a mild day, and always giving, after the planting, a good supply of water. I would add, that the same treatment that I have recommended for Rhododendrons is here applied to Kalmias, Azaleas, Andromedas, Vaccinums, and Cistus—and to all with an equally satisfactory result.

I would recommend all who may wish to cultivate the Rhododendron ponticum extensively, to provide their stock of plants by raising them from seeds. The mode is a cheap one: and, besides the number of the plants which may be obtained by it, a considerable variety of kinds is acquired. In those which I have reared, the variety is almost endless, as to the shape, size, and colour. The seeds should be sown in February, upon a gentle hot-bed.—*JOHN GOW, Gardener's Magazine.*

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON DRYING FLOWERS.—I am very desirous of knowing how to dry flowers, as I am making a collection of Pansies, and wish, instead of drawing them, to have a dried specimen of each, that I may not get the same plant twice over. I find it difficult to get them to retain their colour—that is to say, the blues and purples. If in an early Number you can give me any information on this subject, I shall feel obliged.

PANSY (2nd.)

ON POISONOUS PLANTS.—I should, and doubt not many other cultivators of flowers, who like me have young families, would also, be much obliged to any of your Botanical correspondents who would give a few remarks by which they might be guided in distinguishing plants possessing poisonous qualities. Is it found that the generality of the plants, in any division of the Linnæan or natural systems, are poisonous or otherwise? Which of the florists' flowers or common greenhouse plants are poisonous? And above all, what is the best antidote for vegetable poisons, and how and in what quantities should it be used?—I find much difficulty in preventing my little ones from picking and tasting leaves of any plants within reach, and I hope some medical amateur of the science will relieve me from my consequent dilemma.

Jan. 9th, 1834.

X. Z.

ON CULTIVATING EPACRIS GRANDIFLORA, &c.—I should be happy if any of your numerous readers would furnish me with an account of the means of cultivating the *Epacris grandiflora* and *Correa speciosa*; also the various species of *Cenothera*.

ALBERT PHILLIPS.

Jan. 15th, 1834.

ON FUCHSIAS AS BORDER PLANTS, &c.—Will all kinds of Fuchsias flourish under the same mode of treatment as that adopted by Mr. SHARMAN in respect to the *F. gracilis*, viz. cutting them down every autumn and leaving the roots in the common ground, with only a covering of leaf-mould through the winter? The sorts I cultivate, besides the *Gracilis*, are the *virgata*, *microphylla*, *elegans*, *globosa*, and *bacillaris*. Also, will the Double Yellow Rose-Tree flower and flourish in the neighbourhood of Sheffield, in the open ground? My garden receives all the sun till about one o'clock in the afternoon, and the soil is chiefly composed of leaf-mould, decayed wood, &c. An answer to the foregoing questions, in an early Number of your very cheap, useful, and interesting publication, will greatly oblige

A CONSTANT SUBSCRIBER.

ON THE SITUATION OF A GREENHOUSE, &c.—The *Floricultural Cabinet* has been a favorite with me from its commencement: it is exactly the sort of book for a *practical* gardener, and also for the many who like myself are fond of flowers, and employ their leisure hours in cultivating the little spot of ground at the back of their houses in "the pent-up city," which they dignify by the name of a garden! I have *LOUDON*, and *MAUND*, and *CURTIS*, and *SOWERBY*, and *WITHERING*; and when one of my favorites looks sickly, I turn over their pages to ascertain the nature of the disease, whether it is owing to soil or situation—to too much or too little rain or sunshine; and after all,

I can gather from their voluminous pages but small satisfactory information upon the *simple, every-day points* on which I seek it. I find readily enough its class, and order, and genera, and species; that it is a native of such a climate, and was introduced into this country by so and so. I attend minutely to the instructions under the head of "Cultivation"; nevertheless my fragrant favorite gets worse and worse, and ultimately dies. In what particular have I erred? If CURTIS, or LOUDON, or MAUND were at my elbow indeed, all would be right; but as it is, my care and attention are thrown away. Now in your little book I find perhaps the mode of treatment which this very flower requires, minutely detailed by *practical* men; or if not, I have nothing more to do than sit down and state my Botanical case, and some one or other of your well-informed correspondents solves my difficulty of years' standing, in the next or some subsequent Number of the *Floricultural Cabinet*.

I have it in contemplation to erect a greenhouse; but if I do, from the nature of my confined situation, I must place it where the plants will have *but little sun*. I propose to carry a flue round it, and I shall feel *particularly* obliged to some of your numerous correspondents if they will inform me whether, in such a situation, *artificial heat* will so far answer my purpose as to ensure me a reasonable prospect of success in rearing and preserving Geraniums, Myrtles, &c. &c.

A LOVER OF FLOWERS.

P.S. The plan of your correspondent (announced in your July Number) for rearing bog plants upon roofs and balconies, was to me worth the price of the volume: so precious is space to me in my miniature garden. I shall certainly try it.

ON FLOWERING PELARGONIUMS IN WINTER.—I shall feel greatly obliged if you, or any of your correspondents, would take the trouble to inform me, through the medium of your Magazine, how to flower Pelargoniums (Geraniums) in winter. J. T.

January 25th, 1834.

ON CLIMBING ROSES.—Would you oblige me, as doubtless it would oblige many others also, by giving in the next Number of your excellent little *Cabinet* a list of a few of such *running* Roses as are best adapted for covering trellis-work, &c., and will succeed each other in their time of blossoming? Several of the cottages of my poor have been recently repaired, and ornamented with rustic porches; and I am anxious to supply them with Roses which are of a hardy nature, and will grow and flower freely.

Jan. 20th, 1834.

A COUNTRY CLERGYMAN.

[The following kinds of Climbing Roses are of quick growth, hardy, and handsome flowering; and may be had at most of the public nurseries:—Double White Ayrshire, Yellow Ayrshire, Bengal florida plena, Boursoulti rubra, Boursoult alba, Hermite de grand Val, Incarnata scandens, Knighti scandens pallida, Moschata scandens, Scandens Caroliniensis, Sempervirens Double, Seven Sisters Rose, Roxburghii alba, Hyacinthina rubra, Grevillii rubra, Russelliana rubra pallida, Banksia lutea, Banksia alba, Multiflora alba, Multiflora rubra.—CONDUCTOR.]

ON DOUBLE WHITE ANEMONE, &c.—Can any of your numerous correspondents inform me where I can purchase the Double White Anemone, and the Trillium sessile? J. MILES.

ON THE CULTURE OF SEDUMS.—I should be obliged by information on the culture and mode of flowering the genus Sedum in pots. I have fifteen species, not one of which has yet flowered with me. SNOWDROP.

ON SOILS, &c.—The greatest praise is due to you for being the originator and conductor of *The Floricultural Cabinet* and *The Gardener and Forester's Record*, especially for being careful, when describing new plants, to give the synonymous names, where such exist; this is of great service to Gardeners as far as I am able to judge; and it is the opinion of other Gardeners, it

would be better to incorporate the two works into one, and would answer the purpose better, as the separation impedes the sale of the works. You have promised us a list and description of the varieties of *Camellia Japonica*; it has not yet appeared.—[We had it promised us, but it has not yet come to hand.—COND.]—In respect to INNOVATOR on the Pink, as far as any one is concerned by being troubled with earth worms, I perfectly agree with his mode of preventing their injurious effects, having successfully adopted the plan.—I wish to know from you the method of placing a piece of window glass over a pot of heath cuttings, &c. as given in the 1st Vol., page 19; does it consist of one piece placed on the top of the pot,—[it does—COND.]—or of five pieces formed so as to bring them similar in shape to a hand glass in miniature? An early answer will oblige.

I wish to know of Mr. Hogg, what he means by *maiden earth*; does he in every instance, where he has occasion to mention it in his Treatise on Florist Flowers, mean maiden loam, or the top spit of a loamy pasture field? I consider *maiden earth* an *indefinite* term, as there is maiden loam, maiden peat, maiden wood-earth, and a variety of other maiden soils of tints, textures, complexions. &c.

A WELL WISHER TO YOUR MAGAZINES.

Dec. 6th, 1833.

ANSWERS.

CULTURE OF THE ANEMONE.—In reply to B. C. L.'s inquiry concerning the culture of the Anemone, I beg leave to inform him, through your *Cabinet*, the method I have adopted for the last twenty years. Take two parts of rich meadow trenching earth, sward and all, and one of rotten dung from an old cucumber bed; let it be turned four or five times, to sweeten and pulverise it; then take as much as will be sufficient to make the bed from two and a half to three feet deep; after letting it stay two or three weeks to settle, rake the surface of the bed even, and the last week in November, or the first in December, plant your roots: take a planting-board, as described in Vol. I. p. 82 of the *Cabinet*; make your holes, and put in your roots with the crowns upward, and cover them with the same compost. I prefer planting with the board and dibble, because the roots are then all one depth in the ground, and they come up all at the same time. As to planting Anemones in the month of March, as is the practice of some, I am confident they never can get a general good bloom, neither will they have an increase of roots.

JAMES MILES.

Hilperton, near Trowbridge, Jan. 15th, 1834.

ON THE BIGNONIA, &c.—A correspondent, at page 21, requests information how to propagate the Bignonia. I have a large plant thirty feet high, which sends out a sufficient quantity of suckers to supply all the increase that I need; but I have propagated from ripened cuttings, and from pieces of the roots. A neighbour of mine propagates it from layers, each shoot flowering in about two years. I have raised it from seed that was sent me from America.

AN ARDENT AMATEUR.

ON PINKS, &c.—I expected nothing more would have been said respecting my mode of growing Pinks, after the authority I adduced in proof of others producing them as large, or larger, than myself; but I find myself beset by two more two-inch growers—one, Mr. Wigg, who declares his maximum standard to be two inches, and that he won the first prize with these THINGS; this is really a disgrace upon the Florists of the neighbourhood if there were any competitors. It is well known that twenty years ago, 2½ inches was the minimum standard. Is this not retrograding with a vengeance, when every branch of Floriculture is making such rapid strides in advance? Mr. Wigg asks for my plan: I refer him to your First Volume, September Number, page 146, which, if fully acted upon, will amply repay him, particularly if he attends to the manner of preparing the pipings. I am the more anxious to impress this upon his mind as he will in the course of three or four years find every laced flower come perfect, instead of half the petals plain, which is the

case with half the beds I see. This defect arises entirely from neglect in this matter. I received a plant of Lady Wharncliffe Pink a day or two back; it had a shank under ground of near four inches in length. It is impossible for Pinks to thrive and grow *luxuriantly* when propagated in this careless way. This piping must have been cut at least at the sixth joint. It is well known, that fruit trees plunged in the ground in this way, never thrive; and why should Pinks? Carnations will not submit to it. If I were to reply to B. M., I am fearful my observations would be beyond his comprehension; I shall, therefore, defer it till his *assures* that he has, with the assistance of one of his brothers in intellect (one of which adorns most parishes,) solved the enigma quoted at the latter part of his Query.

February 13th, 1834.

INNOVATOR.

REFERENCE TO PLATE,

1. *Emily Tulip*.—This very fine Bybloemen Tulip was raised from seed, by the late Mr. CLARK, of Croydon, in Surrey: it broke and became variegated in the garden of Mr. Hogg, Florist, Paddington, near London. It is finely feathered, and slightly lined with a violet colour. Mr. CLARK's breeders, which are held in the highest estimation by the London Florists, have produced some of the finest varieties of Bybloemen, Bizard, and Rose-coloured Tulips that are in cultivation.

2. *Cornus capitata*.—Tetrandria, Monogynia. Cornæ. Synonym. *Benthania frugifera*.—We are at a loss for words calculated to give expression to our admiration of this most truly splendid evergreen shrub. Seeds of it were sent by Sir ANTHONY BULLER, during his residing in the East Indies, to his relative, J. H. TREMAYNE, Esq., Heligan, in Cornwall, in whose garden the plant was raised by the very worthy gardener, Mr. ROBERTS, who has had the honour and pleasure of raising, flowering, and fruiting, for the first time in Europe, this unrivalled hardy shrub. The fruit in the figure is from the finest on the branch sent us. The flowers are terminal, and surrounded by an involucre two inches across, of four yellowish parts resembling petals. The real flowers are of a whitish green, small. The profusion of both parts, in the heads of flowers, render them very showy. The flowers are succeeded by a profusion of splendid fruit, which from their weight, are somewhat pendulous: the appearance during autumn and winter must form a most delightful object. The flesh is rather insipid and slightly bitter to the taste, but somewhat agreeable. It is of a yellow colour inside. The plant was raised in 1825, and has been planted out in the open air; it has not required even the slightest protection during winter. It is growing in a strong soil. The bush is now seventeen feet high, and spreads proportionably. It is readily increased by seeds, layers, or cuttings struck under a hand-glass, using a loamy soil. Dr. WALLICH has twice published this plant by the name *Cornus capitata*, as this was its first title sent to this country; we have retained it for the present, not having yet seen any just reasons for changing. Dr. LINDLEY remarks, that it differs essentially from *Cornus*, both in flower and fruit. During the coming season perhaps the matter may be set at rest.

FLORICULTURAL CALENDAR FOR MARCH.

PLANT STOVE.—Many kinds of stove plants will now approach their flowering season; they will therefore require an increase of heat, keeping the house at 85 degrees by day, and 75 by night. For watering and cleanliness, see directions in February Calendar. Cuttings of many kinds of stove plants may now be taken off and struck in moist heat, using sand, or very sandy loam, to strike in. [*An Article on propagating Exotics is now in preparation, and will appear soon.*]

GREENHOUSE.—Admit air as much as possible every mild day, this being most essential to the health of the plants, and to their flowering satisfactorily. If this is not attended to, the plants will not only be drawn up, but be infested with insects. As the new shoots are now beginning to push, if air is not given as directed, they will become weakly, unsightly, and leafless, and the flower-buds will eventually drop off; to prevent which, also, protect in inclement weather. Look over the tubs and pots every day, and attend most strictly to watering; never allow a plant to flag, nor give it water till the soil appears dry. For cleanliness, &c., see February Calendar. The plants, in general, should now, if not done last month, have some fresh soil given to the tops of the pots, tubs, &c. This will add to the vigour of the plants, as well as give a neat appearance. Use the proper soil or compost to each respective plant. Do not raise the soil so high, as that the pot will not hold a proper quantity of water, or be liable to be washed over. Sow seeds of greenhouse plants, annuals, biennials, perennials, &c., in pots, using suitable compost for each kind. Let the soil be fine to sow the seeds upon, and also for covering with. Press it gently close at the surface. Raise the plants in moist heat, and when up admit plenty of air, or remove the pots to the stove, and finally to the greenhouse. Propagate plants by cuttings, layers, inarching, &c.

FLOWER GARDEN.—Sow tender and half-hardy annual seeds—(see lists, Vol. I., page 21); the tender kinds in pots, using light rich soil, very fine at top, and placing the pots in a hotbed frame; the half-hardy ones may be sown on a slight hotbed, in drills, or thinly broadcast. Those tender kinds sown last month may be potted off into small thumb pots, or be pricked out on a well-prepared slight hotbed. Sow hardy annual seeds on patches or beds as required (see Vol. I., page 43); any desirable kind may be sown in pots. Remove all dead leaves, &c. from tender perennials potted last autumn, and renew with a little fresh soil. Indian Chrysanthemums struck in boxes or pots last autumn should now be potted off. Suckers should be taken off the old roots, and potted into small pots. Old roots may be divided. If Auricula plants were not dressed in February, it should now be done; and protect from excessive wet, cold winds, or frost. Let them have all the mild air that can be given, and a gentle shower of rain would benefit them, provided no petals have expanded. Never suffer them to flag. Carnation layers may be planted in borders or pots. Sow Carnation seed. Protect Tulip, Hyacinth, Ranunculus, and Anemone beds from cold driving winds, rain, &c. Finish planting any of these kinds of roots designed for late flowering. Tuberoses should be planted in pots, or in beds in a warm situation, using a rich soil; those in pots should be forced in a frame or hothouse for a few weeks. Sow seeds, plant roots, &c. of Dahlias (see Vol. I., pages 3, 23, 32.) Divide perennial roots, &c. Lobelias, Tigredias, &c. (see page 48.)

SHRUBBERY.—Flowering shrubs may be divided and replanted. Evergreens may be successfully planted. Rose trees should be immediately planted, or they will not bloom well this year. Box edging should be planted, also Thrift, Double Daisy, and London Pride edgings.

F. F. A.



Lupinus mutabilis var. *Cruikshankii*



Throspolum pentaphyllum



Micondorgia filiculis



Chortemus spartuloides

THE
FLORICULTURAL CABINET,

APRIL 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Tulip.* By W.
J. P.

I hailed the appearance of the first Number of the *Floricultural Cabinet, and Florist's Magazine*, with an unusual degree of satisfaction, impressed as I was with the idea of the necessity of a publication exclusively treating upon the subject of Floriculture, embracing at once a fair and free discussion, and combining the very important advantage of a price placing it within the convenience of a numerous class of individuals to obtain it regularly. I have anxiously and attentively perused, and watched the rise and progress of the *Cabinet*, and my impartial conclusion is, (leaving altogether out of the question its present extensive circulation,) that its merits will entitle it to the highest public estimation, and be really calculated to produce the most beneficial results to the general interests of Floriculture, add a zest to the exertions of the amateur florist, and crown with éclat the pursuit of that most enchanting recreation.

As I emerged from the dawn of my admiration of flowers, the Tulip formed a prominent feature, and each successive bloom strengthened and confirmed my devotion to the cultivation of that lovely flower, not forgetting or neglecting the Carnation, Pink, Ranunculus, Auricula, &c., which may justly rank among the "beauties of the creation."

VOL. II.

L

I have hitherto been tenacious to intrude myself upon public notice, but as the *Cabinet* is now in the twelfth month of its existence, and numerous Queries have been made upon the subject of the Tulip, and but one Article (Vol. I. page 149) has appeared, and the season approaching which will so sensibly invite the attention of the bloomers of this delightful and graceful flower, I am induced to make the following detailed observations ^{on} its culture, conceiving that it may be instructive and acceptable to a portion of your readers, some of whom, who ardently admire the flower, are doubtlessly wholly or nearly unacquainted with the general treatment and nature of the plant, and desirous of obtaining information on the subject. To such I address my remarks, trusting that the service it may render to some will be a sufficient apology for the space I occupy in your pages; the more so, as I observe that a few other subjects have been treated on as fully in the *Cabinet*, and feeling, as I do, a lively interest in the success and gratification of my brother florist.

Soil.—The standard of soil for the Tulip should indisputably be a strong, rich yellow loam, laid open and exposed, previous to using, to the action of sun and air, for at least one winter and one summer, turned over every few weeks, by which means it becomes thoroughly decomposed and divested of all acrid and rank qualities, and in a state congenial to the natural order of the vegetation of the plant.

Manure.—There is upon this point some little difference of opinion, even amongst the oldest and most scientific growers of the present day; but it is, I believe, admitted by a very considerable majority of the most inveterate fanciers, that the intermixture of manure upon the undermentioned principle is decidedly beneficial, and is acted upon with the utmost success. It should be equal proportions of horse and cow dung, laid up in a heap for at least eighteen months, turned about once a month, but in frosty weather more frequently, in order to allow the frost well to penetrate it, as it must not on any account be applied to the Tulip bed until it has become completely pulverised, and formed positively into a substance as fine as mould, when it is entirely freed from every pernicious or injurious property, and the existence of insects is nearly or wholly annihilated. Then the application of one-third part of such manure to two-third parts of loam as above

described, will—I speak from the most certain results of experience and adoption—be found highly beneficial in producing a fine full green foliage, a strong upright stem, and a vigorous and perfect bloom.

The Bed—Should be about 4 feet wide, of a length proportionate to the quantity required to be planted, varying from 12 to 50 feet in length, planting seven in a row, the outer root to be about 3 inches from the edge. The box, as it is termed, to be composed of strong wood, not less than one inch and a quarter thick, and raised 10 or 12 inches from the surface of the ground, below which the soil should be completely removed for at least one foot, filling up about one-half of the space so dug out with some rather large cinder ashes, or clinkers, or brick rubbish, or any substance which will not adhere closely, in order to admit of a good drainage under the bed; then over that fill up the remaining space upon a level with the regular surface, or bottom edge of the boarding or box of the bed, with a good dry mellow loam, which has been exposed some months to the air; and then proceed to fill the box with the composition above described, it being first well mixed and united together, to within about an inch of the edge on each side, and raised gradually from each side towards the centre, so that the middle row will be some inches higher in the ground than the outside rows, although planted the same depth, being careful to plant the largest and tallest growing roots in the centre, and the next size in proportion in each of the other three rows, the smallest, or shortest, being outside. Round my bed, when thus arranged, I put a neat, lightly constructed, open green fence, made of one-foot single laths not too close together, and painted green, so that it stands just one foot high above the upper edge of the box of the bed, gives a neat, finished, and ornamental appearance to the bed, and forms a material protection to the growth and bloom of the plants. Where the Tulip stage is then erected over, and properly covered in the blooming season, the bed assumes a regular and handsome appearance, and forms no inconsiderable scene of attraction.

Planting.—The time to be selected for this purpose is from the latter end of October to about the 12th of November, choosing during that period the most open, dry weather, as that description of soil which is used for the growth of the Tulip cannot be dis-

turbed with facility except when at least moderately, if not nearly, dry ; independent of which, it must be found most inconvenient to plant (as very many persons do) a bed of several hundred roots in wet, heavy weather. I judge it, therefore, of much advantage to avail myself of the earliest time above stated, if the weather be fine.

Dibble, or Dibber, as it is termed.—The best that I have ever seen or heard of is one which I and several friends make use of, which is made of block tin, about 6 inches in depth, 3 inches in diameter across the top, narrowing to the bottom to about 2 inches, with a mark or piece of solder outside 4 inches upwards from the bottom. This has a strong handle projecting over the top, sufficiently circular and large to be convenient to the hand, and each extremity soldered well on the outside, near the top or upper rim of the dibble. The material advantage derivable from this dibble is at once explained, and easily and quickly comprehended, inasmuch as by this method the bed (being well settled and prepared for planting, and marked out for the number of rows intended) is not at all compressed and disturbed, because by gently pressing and turning this dibble round until the mark above described reaches the surface of the bed, every hole is made the precise and equal depth (4 inches) throughout the bed, sufficiently large at top to admit of the hand to place the root regularly at the bottom ; the dibble, as described, being smaller at bottom than top, retains the earth, which is quickly turned out into large garden pots, or on a bed or border close at hand ; and then afterwards the roots, when in, can be covered, and the holes filled with the same soil as was taken out, raking the bed over lightly and regularly with a fine rake or spade, to settle the earth firmly and properly. This is, by all who have seen and used it, admitted to be the most perfect and convenient system. It is also an additional advantage to dib the holes a week previous to planting, by which means the soil is well exposed and sweetened, and the bulbs are afterwards less liable to the attack of insects. Previous to putting in the roots, it is a great advantage, and universally adopted by those initiated in the treatment of Tulips, to put a table-spoonful of “sharp sand” in the hole. This is the surest preventive of the attack of the earthworm, or any insect whatever, and preserves many a sickly or damaged bulb from rotting.

From the time the Tulip is planted until the latter end of March or beginning of April, little or no attention is required, where the bed is constructed on the principle above described ; but at that time, as the buds advance in growth, they are more or less susceptible of injury from frost, and particularly a superabundance of wet. With a bed of choice Tulips, then, it is highly advisable, if not indispensable, that a temporary awning or covering, by means of large hoops and canvas, should be thrown occasionally over the bed, to protect it, as much as practicable, from heavy rains, hail-storms, sharp cutting north-easterly, &c. winds, and the chance of sharp frosty nights, which not unfrequently occur at this season. There are many beds, however, in which the choicest varieties are cultivated, that have no such temporary protection afforded them ; but by being properly raised and drained as above described, the root is kept in a vigorous, healthy state, and the buds sustain in general but little injury from such mischances.

Bloom.—In the beginning of May, when the buds become sufficiently matured, and begin to display their various stripes and tints, it is time to prepare to place the upper or main awning over the bed, which on a regular stage is so constructed as to admit of being drawn up at pleasure by means of a roller with pulleys on each slope, so that sun and air can be admitted or excluded as occasion requires, without which convenience the bloom can never be retained so long or in so much perfection, observing always to give the advantage, if possible, of very early morning sun, until the flowers are all in full bloom, and by all means the refreshing air after sunset, if not too cold ; but the flowers to be wholly protected from the weather, and particularly the operation of the sun and wind, with those exceptions. If the season has been dry, and the weather be hot, the plants when in full bloom will probably exhibit symptoms of drooping ; it will then be necessary to apply water moderately and cautiously between the rows, by means of a fine-rose watering pot.

When the bloom is completely over, let the covering be wholly removed, be the weather what it may, and the plants fully exposed. When the foliage and stem have become sufficiently brown and withered, which will be about the 25th of June, by which time the root matures and becomes in a state of rest, take up the roots cautiously with a rounded trowel, strong, being careful not to touch

or cut the bulbs ; separate the largest offsets, and place them in a dry room or shed, where the air has free access constantly, but totally away from the effects of sun or fire. When the bulbs are dry and hardened, (say in about a week or ten days,) place them carefully away until the time of replanting.

The method adopted by many famous Tulip bloomers, who have many hundred named roots to take care of, is to have shallow boxes or drawers, with divisions or partitions in each, only large enough to hold one root in each ; they contain seven holes or divisions from front to back, and may be made any width that is fancied. These rows are numbered from 1 progressively, by which means the roots are placed in them in that order as they are taken from the Tulip bed. The Tulips are of course planted in the precise order in which they are arranged and written down by name in the Tulip book, and if any mistake or error is discovered in the course of the bloom, the book is then corrected. So the roots are taken up and disposed in these boxes, by which means the book and the boxes agree as to order, and any alteration or variation of roots for the subsequent planting can be made at pleasure.

But as this, though a most superior and convenient plan, may be found objectionable on the ground of expense and trouble at first, (as these boxes or drawers should, to be complete, be fitted into a case or frame, after the manner of a chest of drawers, with open ribbed sides and back, and kept in an airy, dry room, away from sun, and where little or no fire is kept,) the best method that I am aware of, in the absence of some such convenience, is to put the roots singly in what is termed technically "small hand" paper, one root only in a piece of paper, with the name of the Tulip written on it. This is the best paper that can be procured for the purpose, being soft and pliable, and not liable to injure the shoots of the bulbs previous to planting.

Offsets—Should be planted about three weeks earlier than the parent bulbs, and tolerably close in proportion to their size, with a layer of sharp sand under them, and covered about two inches with fine sifted soil.

The whole body of soil for the main bed should be first passed through a screen, or coarse sieve.

I have never known or heard of Tulips treated somewhat upon

the above principle, with reasonable attention, that ever suffered to any material extent from insects or weather.

W. J. P.

New North Road, Jan. 7th, 1834.

P.S. If acceptable, I shall be happy to forward for insertion in a future Number of the *Cabinet*, some hints and general remarks (the result of ardent and unflinching application) upon the propagation, wintering, potting, and blooming of the Carnation, Auricula, &c.; and some observations calculated to instruct the young florist on the management of perennial and biennial plants and tender annuals.—[They will be highly acceptable.—COND.]

ARTICLE II.—*On the Propagation of Annuals, &c. by Cuttings.* By the Author of the “Domestic Gardener’s Manual,” C.M.H.S.

An annual plant is supposed by most persons to produce its flowers and fruit (the seeds), and then to perish; and it is treated accordingly. The seeds are usually sown in the borders during the months of March or April, and nine-tenths of the young plants perish by grubs and worms, or by the acerbity of the ever-varying season. They who have the good fortune to possess some erection where a little extra heat can be furnished, frequently produce early plants; and these are placed in their allotted situations by transplanting, and thus fulfil the original intentions of the gardener. Things must remain pretty nearly as they have always existed; and as long as underground enemies continue to live and propagate, we must be content to submit to losses and vexations. There is a way, however, of counterplotting the attacks of every common enemy, by striking, during the months of September and October, such choice annual plants as it is desirable to preserve throughout the winter, and to retain for the production of seed or of cuttings very early in the ensuing summer. I have proved that Balsams can be struck in the autumn, and be made to flower in a short time; the cuttings may be taken off any joint just below the leaves, and of any length; they strike almost immediately in common soil. Balsams, however, can scarcely be retained during the winter, owing to the absence of light. Schi-

zanthus will strike by cuttings six inches long, and flower. I have one by me now, that I caused to take root in August, in loam and sandy peat, without the aid of a glass; it produced bloom in October and November, but *failing to bear seeds*, it remains a stout and healthy plant, with two branches. Clarkia can be struck and preserved, so can Calliopsis (late Coreopsis) of several species. I mention a few only of the many beautiful annuals that can thus be preserved, even in a well protected cold frame of turf, with a good glazed light. The object is not one perhaps of much interest; and the subjects themselves do not appear very ornamental during the dead months, but they *may* prove very useful even to the gardener; and to ladies, and to young people of taste, the practice of raising, or of trying to raise, plants by this process, a fund of rational entertainment, and some instruction, may be procured. Of biennial and herbaceous subjects, such as Calceolaria integrifolia, angustifolia, rugosa,—Salvia of many kinds, Wall-flowers, some Stocks, &c. &c., numbers may be struck, and kept in health for early transplantation. A cold frame, a green-house, or even a sitting-room window, will afford to many plants ample protection, which would all be lost unless they were annually renewed by seeds.

The soil for such cuttings may, in general, be good border earth, or maiden loam and decayed vegetable matter, blended in nearly equal proportions. If single plants be raised, a small pot should be filled thus, above a good stratum of drainage, and then a hole being made two inches deep in the centre of the mould, with a round stick, silver sand, to the depth of half an inch, is to be poured into the hole; upon this, place the base of the cutting, keep it in the middle of the hole, and fill that up with the same sand; shade the plants till they appear to have adapted themselves to their situation, and stand firm and erect; or cover them with small glasses. In raising a stock of plants, Mr. MEARNS' method may be tried. Put the soil into a broad and rather deep pot, so deep only that the cuttings, when planted, shall not quite reach its rim; then make as many holes as there are cuttings—apply sand as above directed, and finally, cover the top of the pot with a suitable piece of flat glass. A gentle sprinkling may at first be given over the surface of the soil, and this should be kept rather moist, but not wet; air ought to be freely given when the plants

appear firm. As the roots emerge, they readily reach *the soil*, which circumstance I think is more conducive to their safety, than the removal would be from a bed of pure sand into separate pots of soil. If these few loose hints—for such only they are,—lead to any enquiry, I shall be happy to furnish every kind of information within my power.

G. I. T.

January 13, 1834.

ARTICLE III.—*Remarks on Sir J. E. Smith's Arrangement of the British Ferns—No. III.* By M.

The genera of Dorsal Ferns, or those which have their fructification on the under side of the leaf or frond, have been founded upon different characteristics by different writers.

RAY, and some other systematic botanists, resorted in the first instance to the shape of the frond; but this is so similar in many of the species, that it is useless, *alone*, as a genuine distinction.

LINNÆUS depended upon the shape of the *sori*, or masses of capsules; whether round, oblong, linear, &c. This forms a much better distinction, but still is insufficient.

SIR J. E. SMITH, who purchased the *Herbarium* of LINNÆUS, and was thus furnished with a vast collection of specimens of Ferns, first suggested an additional principle of arrangement, arising from the form and insertion of the membrane, which in most of the Ferns protects the masses of capsules, and especially from the manner in which this cover bursts when the capsules become ripe. This is found to afford very certain distinctions; to establish the most natural genera; and greatly to facilitate their investigation.

The numerous species formerly included in the genus Polypodium, are by this means divided into three genera—Polypodium, Aspidium, and Cystea.

Polypodium contains four species, which have no cover to the masses of capsules.

Aspidium—Shield Fern, thirteen species; which have a cover nearly orbicular, fixed by the centre, and when ripe separating all round.

Cystea—Bladder Fern. This is a name given by SMITH to a delicate little tribe, distinguished from either of the others by the

VOL. II.

M

globular shape of the cover or involucre, as well as from its passing underneath the masses of capsules. It contains only four species, which are very similar to each other.

For the two species of *Woodsia*—SMITH adopts that name as given by BROWN,—and in the genera *Asplenium*, *Scolopendrium*, *Blechnum*, *Pteris*, *Adiantum*, *Trichomanes*, and *Hymenophyllum*, SMITH agrees with the classification of LINNÆUS, WILDENOW, &c.

These genera include all the Dorsal Ferns; and of those which remain, I will only allude to the *Osmunda*, which well deserves its title, “The Flowering Prince of British Ferns.” It is, indeed, one of the most curious we possess, for the upper leaflets are gradually transmuted into dense clusters of capsules, more resembling a flower than the usual appearance of Ferns. It is a native of the fens and marshy situations, but bears transplantation to drier soils.

I subjoin a list of the British Ferns, arranged according to *Smith's English Flora*, fourteen of which were found at Matlock during the last summer.

POLYPODIUM, Polypody, 4 species.		
<i>P. vulgare</i>	Old walls, trees	Common in most places
<i>P. Phegopteris</i>	Mountainous places	Rare, Westmoreland
<i>P. calcareum</i>	Do.	Matlock
<i>P. Dryopteris</i>	Do.	Tintern—Somersetshire—Derbyshire
ASPIDIUM, Shield Fern, 13 species.		
<i>A. Lonchitis</i>	Mountainous places	Wales—Scotland
<i>A. Ceropteris</i>	Healthy do.	North of England—Scotland
<i>A. Filix mas</i>	Hedge banks	Common in most parts
<i>A. cristatum</i>	Boggy heaths	Norfolk
<i>A. aculeatum</i>	Dry banks	Do.
<i>A. angulare</i>	Shady places—By some supposed a variety of the preceding	
<i>A. lobatum</i>	Hedge banks	Norfolk—Nottinghamsh.—Derbyshire
<i>A. spinulosum</i>	Marshy places	Near Birmingham—Nottinghamshire
<i>A. dilatatum</i>	Woods	Nottinghamshire, Derbyshire, &c.
<i>A. dumetorum</i>	Bushy, stony places	Do.
<i>A. Filix Fœmina</i>	Shady situations	Nottinghamshire—general
<i>A. irriguum</i>	Clear springs	Tunbridge and South of England
CYSTEA, Bladder Fern, 4 species.		
<i>C. fragilis</i>	Shady rocks	Plentiful in Derbyshire
<i>C. dentata</i>	Clefts of high rocks	Scotland—Wales
<i>C. regia</i>	Do.	Do. Do.
<i>C. angustata</i>	Shady rocks	North of England
ASPENIUM, Spleenwort, 9 species.		
<i>A. Trichomanes</i>	Shady, moist rocks	Dove-dale—Matlock
<i>A. viride</i>	Rocks	Carnarvonshire—Craven—York
<i>A. marinum</i>	Do.	Hastings
<i>A. Septentrionale</i>	Do. clefts of	North of England
<i>A. alternifolium</i>	Do. do.	Scotland—but rare
<i>A. ruta Muraria</i>	Rocks and old walls	Common in Derbyshire, &c.
<i>A. Adiantum nigrum</i>	Do.	Do. Do.
<i>A. lanceolatum</i>	Rocks	South of England—Tunbridge
<i>A. fontanum</i>		Very rare

	SCOLOPENDRIUM, Hart's Tongue, 2 species.	
S. vulgare	Shady banks	Common everywhere
S. Ceterach	Rocks and walls	Bristol—Claverton
	BLECHNUM, Hard Fern, 1 species.	
B. boreale	Moist, shady hedge-bottoms	Nottinghamshire—Derbyshire
	PTERIS, Brakes, 2 species.	
P. squilina	Heaths	Very general
P. crispa	Mount. situations	Westmoreland—Wales
	ADIANTUM, Maiden Hair, 1 species.	
A. Capellus Veneris	Moist rocks	Rare—?
	WOODSIA, Woodsia, 2 species.	
W. ilvensis	Rocks	Wales and North of England
W. Hyperborea	Do.	Do.
	TRICHOMANES, British Fern, 1 species.	
T. Brevisetum	Wet Rocks	Belbank, near Bingley, Yorkshire
	HYMENOPHYLLUM, Filmy Fern, 1 species.	
H. tunbridgense	Amongst moss & rocks	Wales—Westmoreland—N. of York
	OSMUNDA, Osmund Royal, 1 species.	
O. regalis	Bogs	Holme Fen—Whittlesea Mere
	BOTANYCHUM, Moonwort, 1 species.	
B. Lunaria	Mount. pastures	Nottinghamshire—Derbyshire
	OPHIOGLOSSUM, Adder's Tongue, 1 species.	
O. vulgatum	Moist pastures	Nottinghamshire

The four remaining genera, though classed with the Ferns, more resemble the Reeds and Mosses ; they are—

LYCOPODIUM, Club Moss, 6 species.
 EQUISETUM, Horse Tail, 7 species.
 PILULARIA, Pillwort, 1 species.
 ISOETES, Quillwort, 1 species.

ARTICLE IV.—*On the Cultivation of Chrysanthemum Indicum, so as to have fine Flowers upon Dwarf Plants.* By Mr. GEORGE HARRISON, Nurseryman, Downham, Norfolk.

The different varieties of Chrysanthemums are highly prized by the Chinese, who are supposed to be in possession of upwards of fifty varieties. Since their general introduction into England, they have added a degree of splendour to our green-houses and flower gardens, and that at a season when few other plants are in flower. A variety of ways have been tried to produce fine flowers upon small plants. I have adopted the following plan for five years, and it has enabled me to have an abundance of healthy dwarf blooming plants. Three years ago I raised in this manner about nine hundred plants, of about thirty-eight varieties ; the whole I placed upon a stage in the greenhouse, and they bloomed

in December. Several eminent floriculturists came from town to see the plants when in bloom, and they declared that they had not seen such a sight before, nor was there any thing likely to compete against the display of bloom and plants, in the neighbourhood of London. Early in May, a quantity of plants are plunged out in the open border, where they are fully exposed to the sun, and plentifully supplied with liquid manure, so as to get the shoots strong by the middle of September; the greater part of the shoots will have by that time shown flower-buds; these shoots are bent down, and laid into pots called "small forty-eights"; they very soon begin to emit a number of roots at the part laid in the pot. As soon as the roots have got a little established, the plants are disengaged from the parent; afterwards they are tied up and watered, and removed into frames or pits, where they are plentifully supplied with air and water, so as to enable the plants to perfect their flowering. The plants will soon establish themselves, and begin to expand their bloom, when they are removed into the greenhouse.

Plants raised in this manner are from a foot to eighteen inches high, and clothed with foliage from the pot up to the flowers. Should more than six buds be formed on each plant, they are taken off: consequently, those remaining attain to a larger size, and a superior shape and colour, than plants flowered in the ordinary manner.

The compost I use is a rich yellow loam, with a little peat and sand added.

GEORGE HARRISON.

Downham Nursery, Feb. 14th, 1834.

ARTICLE V.—*On the Culture of Calceolarias as Greenhouse Plants.* By Mr. JOHN MENZIES, Gardener to CHRIST. RAWSON, Esq., Hope House, Halifax.

The numerous species and varieties of the above beautiful tribe of plants, with their singularly shaped corollas, almost of every colour, render them superior to any other for the decoration of the greenhouse during the summer months. In winter, the *Calceolarias* are of course in pots, according to the size of the plants,

generally about four inches diameter at top. Early in February I pot them in a size larger, in a compost of equal parts of sandy loam and tree-leaf soil, with a small portion of heath mould; care must be taken to have the pots properly drained at this and all future shiftings. When the roots fill the pots, they should be again shifted to a size larger, in the same sort of compost as above, and placed in the greenhouse, where they should have a plentiful supply of water, when they will grow freely. By the first or second week in April they will again require a larger pot, adding rotten dung to the compost for this and the last shifting; at this time I have it broken finely with the spade, but never use a sieve. I then remove them to a pit by themselves, having in it stone shelves about eighteen inches from the glass. At this stage of their growth they should be liberally supplied with water, and fumigated if necessary. In the evening, before the frame is closed, some water should be thrown on the shelves, and occasionally over their leaves, which greatly accelerates their growth and luxuriance. When their flower-stems appear above the leaves, those that require it I remove into pots from twelve to fourteen inches diameter; some shrubby ones, with *C. purpurea* and others of similar habit, are not placed in so large a pot. They are then removed to the greenhouse to flower; after flowering, they are cut down and turned out of the pots, and are then divided and potted in suitable sized pots.

Many of them may be increased at all times of the year. *C. purpurea* *Harrisoniana*, &c., with the shrubby kinds, are increased by cuttings from March till August. The only sorts that I am acquainted with that will seed freely, are *C. peuduliflora* and *corymbosa*; all the other kinds will produce seed by impregnation. Many have the anthers hidden under the upper lip of the corolla, in which case it will be necessary to cut a small piece out of it, which will give a better opportunity to the gardener who wishes to procure new varieties. Seeds sown later than August: the young plants will have to be kept in a little heat during winter, and treated like the others in the following spring. Those that are kept in cold frames scarcely require any water; but those that are kept in the greenhouse during winter, should be treated as other greenhouse plants.

JOHN MENZIES.

30th January, 1834.

ARTICLE VI.—*On a simple and successful Method of Cultivating the Lobelia cardinalis, &c.* By MR. JOHN WINFIELD.

I take the liberty to suggest, that the general usefulness of the *Floricultural Cabinet* would be greatly increased, if some of your readers who do not possess any great convenience for the cultivation of plants, would communicate, for insertion in it, the success which attends their simple experiments for that purpose. No doubt the generality of your readers have neither stove, nor hot-house, nor greenhouse, but only a hand-light or hot-bed, for raising their plants; and, therefore, their observations would be particularly valuable to those in a like situation with themselves. To prove my willingness to act upon the plan which I now propose that others should follow, I beg leave to mention my method of cultivating the *Lobelia cardinalis*, as it appears to me to be more simple than that mentioned by "An Ardent Amateur," at page 225 of Vol. I. I would, then, recommend to those who have no great convenience for plants, to take their *Lobelia* roots out of the ground in the beginning of November, clean them, and keep them dry and protected from the frost (for instance, on a board in a dry cellar) till the end of March. Then separate the roots, and plant each of them in a small pot; and if the plants cannot be put in a hot-bed to start them, keep them in a room with a fire till they have fairly taken root. After that strengthen them by degrees in a cooler place, and plant them out in a light rich soil, in the beginning of June; and as they grow, trim them up to one stem, and water them every night in warm weather. Such is my treatment of the *Lobelia cardinalis*, which has been as successful as it is simple; and I may add, I have scarcely seen a more beautiful bed than I have had this year, having mixed the *Verbena melindres*, which so soon covers the ground, with the *Lobelia cardinalis*. As I profess to write only for the information of those who have little or no convenience for their plants, perhaps it may not be uninteresting to such persons to hear, that I preserved during last winter most of the plants which I had of the *Verbena melindres* in the open border, by putting some coal ashes over them; my situation is a dry one.

12th December, 1833.

JOHN WINFIELD.

ARTICLE VII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

(CONTINUED FROM PAGE 60.)

NAMES.	DESCRIPTION.
343 Imperial Crimson	Good crimson.
344 ————— Purple	Fine purple.
345 Isabella	Very fine curled large lilac.
346 Jean d'Arc	Deep scarlet.
347 Jenner.....	Singular light lilac blush.
348 Jeunne Albert.....	Small bright red.
349 ————— Eliza	Semi-double light purple.
350 ————— Henri	Fine scarlet.
351 Jolie rouge changeable	Fine blush.
352 Josephine	Deep blush.
353 Juliet	Fine curled pink.
354 Julius Charles.....	Fine lilac pink.
355 Junon	Salmon colour.
356 ————— sans epine	Deep purple, variegated.
357 Jupiter.....	Large fine bright blush.
358 Kariaskaki	Fine purple.
359 Kenlock Cunningham	Purple tinged with blue.
360 Koratry	Pink, crown scarlet.
361 King's Mantle.....	Light purple.
362 La Beaute de Strasbourg	Fine large pink.
363 ————— eblonissante.....	Striped red and purple, very splendid.
364 ————— ethereal.....	Beautiful light blue, pink edge.
365 — Belle Africaine	Fine globe scarlet purple.
366 ————— Enchantresse	Bright scarlet purple.
367 ————— Hollandaise	Large semi-double crimson.
368 ————— Pourpre	Red and purple.
369 — Charmante Adele.....	Beautiful large pink.
370 ————— Amelia.....	Fine small blush.
371 ————— Antrichienne.....	Pale red and pink.
372 ————— Caroline	Fine light blush.
373 ————— Dauphine.....	Very fine crimson.
374 ————— Francaise	Beautiful striped blush.
375 ————— Louise	Small pretty red.
376 ————— Romaine.....	Fine large blush.
377 ————— Venuse	Light scarlet.
378 — cherie	Small pale blush.
379 — coquette	Light purple and red.
380 — curiosite	Beautiful rose colour.
381 — Dame Jacinte.....	Blush in clusters.
382 — delicatesse parfait	Delicate blush.
383 — desiree	Large pale rose colour.
384 L'Admirable	Fine semi-double deep crimson.
385 La Duchessee de Montabello....	Fine deep blush.
386 ————— d'Orlean	Blazing crimson.
387 Lady Broughton.....	Crimson purple.
388 La Fidelle	Light purple.
389 — Globe blanche	Fine large white.
390 — Gracieuse.....	Large deep blush.
391 — Grande Chaprone	Light crimson pink.
392 ————— Therese	New—delicate blush, changing white.
393 — Haute puissance.....	Close bright scarlet.

NAMES.	DESCRIPTION.
394 L'Aimable Etrangere.....	Fine pale red.
395 La Jolie Felicia	Light pink, very double.
396 L'Alliance.....	Brilliant red and purple.
397 Lamentia.....	Beautiful purple.
398 La merveilleuse	Large pale blush.
399 L'amie de cour	Dark rich velvet purple.
400 ——— Guillaume	Close deep purple.
401 La Naine.....	Elegant scarlet globe.
402 — Nouvelle Dauphine	Small dark purple scarlet.
403 — Petite Elize	Pale blush.
404 ——— Louise	Small anemone flag scarlet.
405 — plus belle des jolies	Large globe deep blush.
406 — Princesse Charlotte	New—beautiful large blush.
407 L'Archeveche de Grenada	Light pinkish red.
408 Last Tribute	Elegant scarlet globe.
409 La superbe	Fine light scarlet.
410 — surprise	Fine white.
411 — tendresse	Bright pink.
412 Latone	Bright red.
413 L'Auteur parfait.....	Dark purple.
414 La variable	Blush and pink.
415 vertu	Deep crimson.

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

Adam the Gardener. By CHARLES COWDEN CLARKE. London, 1834, pp. 279.

This is a very interesting publication, and we recommend it to our juvenile readers. The contents consist of excellent remarks on flowers, fruits, &c. suitable for each month in the year. As a fair specimen of the work, we have selected a portion of the observations for the month of August:—

“August.

“Come to the yellow fields, golden with corn!
The brawny August, with fast reaping hand,
Lays low the earth's tall plumes of pride; and blithe
Young gleaners, in bee-swarms, trample the shorn
Stout stubble down, with naked feet and torn,
In little laps garnering allowed tithe;
And wheaten sheaves are bound with strawy band,
And to the hungry barn brown Ceres' wain is borne.

With no more music than the woods afford,
No daintier food than is the wild strawberry,
With water from clear brooks which clean deer ford,
We may be fed, and pleased, and careless merry;
And fear not but the day's sweet exercise
Will bring night's balmy slumber to our eyes.

“LYRIC LEAVES.

"Adam," said Mr. Stock, "do you remember who Octavius Cæsar was called—the first of the Roman Emperors?" "Yes, papa; he afterwards took the name of Augustus." "Well, then, the title of the present month was changed in honour of him. Before his advancement to the dominion of the Roman Empire, July and August used to be called Quintilis, and Sextilis, or fifth and sixth months, being the fifth and sixth in succession from March, which was, originally, the first of the year: and, in consequence, September, October, November, and December were considered, as their names signify in Latin, the seventh, eighth, ninth, and tenth months.

"Come, my boy, we must set to work, and prepare yonder bed for the purpose of sowing some winter spinach for our early spring crop. That bed, I mean, under the south wall; it is a good piece of soil, and lies dry and well for the winter sun. Now, you shall do all this yourself; so dig it up in your neatest manner, and next week you shall sow the seed. Scatter it thinly over the surface, then tread it in, and, lastly, rake it over lightly. If we have good fortune with the seed, we shall have a fine crop of spinach for our dinners of early lamb, and many a good supper of it with poached eggs. I will now give you full directions for managing this spinach-bed, in order that I may prove whether you bear in mind what I tell you. So, remember that you get the prickly-seeded spinach for the winter crop, because the plants are more hardy. Then, do not forget, when the plants have come up about an inch above the ground, to weed the bed, at the same time thinning it, leaving a space of about four inches between each plant of spinach. While you are performing this task, I will be preparing two beds for sowing cabbage seed for our next summer and autumn supply; and then I will prepare and manure that piece of ground for transplanting some of the young brocoli plants, which will be coming into perfection next spring with the lamb and spinach. I shall plant them about two feet asunder, and you must remind me to water them now and then, if the weather continue dry. I must also hoe up the earth round the stems of those which we planted out last month. After this job, I shall transplant some of those savoy, at the same distance from each other, and I expect many a fine dish from them, all through November, December, and January.

"The next thing will be to prepare a bed or two for onions, to come in with our spring salads, and some carrots. As you and your brothers and sisters are fond of radishes and small salad, you may prepare a small bed for each. They will be ready for cropping by the time you have consumed the last stock. And do not forget to remind me, towards the last of the month, that I sow some cauliflower-seed for our spring supply."

"In the course of the present month, both the father and son did not omit to clear the young asparagus plants from weeds, and to transplant more celery from the beds into trenches; also to keep carefully earthed up those which they had planted out a month or two previously, and which were growing. They were also careful in watering regularly, while the weather was dry, those young plants which they had last trenched. In the course of their employment, too, they examined every now and then the artichokes, and as the fruit began to fill, they cut off the small heads that grew upon the suckers, in order that the whole vigour of the plant might be reserved for the principal fruit. And as these reached their full size, and were fit for the table, they broke the stems down to the ground, after cutting the produce. Then they planted out lettuces from the seed beds, and endive upon well-dug ground, setting the roots above a foot apart, first trimming the lower ends and the roots. Those which had been put out last month, and had grown to a full size, they tied up closely with bass, in order that their inner leaves might become white and fit for salads.

"Papa," said Adam, "why are the insides of the endive plants white after they have been tied up?" "Because," said his father, "they are deprived of the benefit of the light of the sun, which is absolutely necessary for giving to them the green tinge which they acquire when growing in a natural state. Have you not observed, that the stalks of potatoes, and of other vegetables immediately under the surface of the ground, are always white, and that the parts of the same stem above the ground are green, that is, when they are

growing in the open air? To show you that this effect must arise from the action of the sun's rays, you must remember to have noticed the long stalks from potatoes that we have growing in the cellar where no light could come to them. They were always perfectly white, and the leaves were paler than the lightest straw-colour. All plants become pale and feeble when shut up for a length of time in dark rooms. So earnestly, too, do they seem to desire the light, that potatoes and other vegetables with long stems, when laid in a dark corner of a cellar in which there is a small window at a distance, will uniformly stretch out and grow towards the light; and as soon as they reach it, the portion presented to the light will become green, while all the remainder of the stalk that is still in darkness will continue white. I cannot tell you why the light should make them green, any more than I can explain to you why one flower should always be red, another blue, and another yellow. A reason can of course be given for it, as a reason could be given for every thing that happens in nature; nothing takes place without a cause, and this cause was ordered by the same infinitely-wise Being that created the plant. Some chemical philosophers have, with great ingenuity accounted for the different colours in flowers and plants, and when you are a few years older, you will do well to make yourself acquainted with their clever reasonings; at your present age it would be impossible to make you comprehend them."

(TO BE CONTINUED.)

New and Rare Plants figured in the Periodicals for March :

Curtis's Botanical Magazine. Edited by W. J. HOOKER, LL.D.

F.R.A. and L. S., and Regius Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured ; 3s. plain.

1. *Billbergia purpureo-rosea*, Rose-purple Billbergia. Class, Hexandria; order, Monogynia; natural order, Bromeliaceæ. Among the remarkable feature in a tropical forest, are the numerous and beautiful species of plants which attach themselves parasitically to the trunks of trees, investing the stems and branches, and adorning them with adventitious flowers and foliage. The chief of these are the Orchis and Bromelia, or Pine Apple families. The Billbergia belongs to the latter of these, a group of vegetables, which not only affords the most richly-coloured blossoms, accompanied by foliage armed with exceedingly annoying spines, but one of the choicest of productions for our desserts, and, according to the information of scientific travellers, a truly refreshing beverage in the water that collects in the hollows formed by the inflated leaves, and which is eagerly sought after by the natives of those hot countries. The present species is one of the most beautiful of its tribe. It is a native of Brazil, was introduced by that zealous cultivator, Mrs. ARNOLD HARRISON, and flowered for the first time in this country, I believe, in 1833, in the hot-houses of the Liverpool Botanic Garden. Flowers: in a compound raceme, from eight to ten inches long, bearing numerous rose-coloured flowers, the petals alone being purple. Billbergia, from J. G. BILLBERG, a Swedish botanist.

2. *Ficus comosa*, Tufted Fig. Polygamia, Diœcia. Utriceæ. A most elegant tree, growing in Maderia, forty feet high, with gracefully waving, sub-pendulous, tressy masses of dark rich evergreen, shining foliage. Introduced into England from Circars in 1808.

3. *Ornithidium album*. Gynandria, Monandria. Orchideæ. A native of Trinidad, whence it was sent to the Glasgow Botanic Garden, by Mr. DAVID LOCKHART. It flowered in November, 1833. Flowers: rather large, white, sessile, solitary. Ornithidium, from *Ornis*, bird; and *cidos*, like,—the upper lip of the stigma being beak-like.

4. *Westringia cinerea*, Ash-coloured. Diandria, Monogynia. Labatæ. The present species is a very desirable one for cultivation, and was discovered

by Mr. BROWN on the south coast of Australia. Introduced into this country in 1822. Flowers: handsome, solitary, pale purple, with deep purple spots, the lower lip having also yellow spots. Culture: increased by cuttings; soil, peat; greenhouse protection. *Westringia*, from J. P. WESTRING, Physician to the King of Sweden.

5. *Westringia Dampieri*, DAMPIER's. Diandria, Monogynia. Libiate. This is even a more desirable species than the above for cultivation in the greenhouse, and very distinct from it. Flowers: solitary, white; upper lip without spots; lower lip with yellow and purple spots. Blooms from September to December.

6. *Francoa sonchifolia*, Sow Thistle-leaved. Octandria, Monogynia. Galacineæ. Synonyms, *Llanpanke amplissimum sonchifolia*, *Panke sonchifolia*. This species is at once distinguished from *Francoa appendiculata* by the presence of a stem; the flowers being very similar. The present species is a large branching plant. It was first raised by Mr. JOHN MENZIES, gardener to CHRISTOPHER RAWSON, Esq., Hope House, Halifax, from seeds sent from Chili. Flowers, sub-erect; petals, lilac coloured, darker in the centre. Dr. HOOKER believes that *F. appendiculata* and *sonchifolia* are mere varieties of the same species. The plant is hardy, increased by seeds or divisions, hardy.

7. *Monarda fistulosa* (*flore maculato*), Spotted flowered. Syn. *M. purpurea*, *M. allophylla*, *M. undulata*, *M. altissima*, *M. affinis*, *M. media*, *M. oblongata*, *M. mollis*, *M. menthaefolia*. This plant was sent from New Orleans, by Mr. DRUMMOND, to the Glasgow Botanical Garden, and flowered in the open air in the summer of 1833. The plant is hardy. Flowers, pale rose-coloured, with darker spots.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Ph.D., F.R.S., L.S., and G.S., Professor of Botany in the University of London, &c. &c. Price 4s. coloured; 3s. plain.

1. *Bartholina pectinata*, Syn. *Orchis pectinatus*, *Orchis Burmannia*, *Arethusa ciliaris*. Gynandria, Monandria. Orchideæ. This plant is a native of the Cape of Good Hope, and flowers from October to December. We presume that this, like all the Cape Orchideous plants, is incapable of being cultivated permanently by any means hitherto discovered; for the roots, although when first imported they flower, afterwards disappear. They should be planted in sandy loam, and kept in as light a greenhouse as possible; for it is probable that the reason of their disappearing is the want of light during their growing season in this country. Flowers: purplish lilac. *Bartholina*, in memory of the great Danish anatomist and physiologist, THOMAS BARTHOLIN.

2. *Liatris scariosa*, Large flowered. Syngenesia, Polygamia, Æqualis. Compositæ. Syn. *Serrattula scariosa*. It is a native of North America, inhabiting sandy woods, and growing three or four feet high. Flowers: rose, with a higher coloured centre; the blossom is about one inch and a half in diameter. Blooms freely, and is quite hardy. In bloom from July to October. It well deserves cultivation.

3. *Pyrus crenata*. Icosandria, Digynia. Pomaceæ. Syn. *Pyrus vestita*. This plant is found naturally in the highest of the mountainous parts of Northern India, at from 9,000 to 12,000 feet of elevation, flowering in May. The fruit is eaten by the hill people. Growing in the garden of the London Horticultural Society. Flowers: greenish white. *Pyrus*, from *Peren*, its Celtic name.

4. *Aster eminens*; var. *virginicus*, Pure White Lofty Aster, Syngenesia, Polygamia, Superflua. Compositæ. Syn. *A. junceus*, *A. longifolius*, *A. albus*. An extremely common North American herbaceous plant, found growing by the sides of canals, and in marshes from New York to Carolina, flowering from September to October. Flowers: white. Plant grows from

three to seven feet high. Aster, from *Aster*, a star,—in allusion to the form of the flower.

5. *Beloperone oblongata*. Diandria, Monogynia. Acanthaceæ. Syn. *Justicia oblongata*. A pretty species of hothouse plant; native of the Brazils. Grown in this country by Mr. KNIGHT, of Chelsea Nursery. Flowers: of a fine rosy purple. Blooms freely, and deserves general cultivation. It is cultivated easily by cuttings. *Beloperone*, from *Belos*, an arrow; and *perone*, a strap or band,—in allusion to the arrow shaped band which holds together the two cells of the anther.

6. *Ribes punctatum*, Dotted Currant. Pentandria, Monogynia. Grossulaceæ. Syn. *R. prostratum*. Rather a pretty evergreen shrub; native of Chile. It is remarkable for the shining yellowish green appearance of its leaves, and the short bunches of yellowish flowers. It is hardy enough to live in a dry border without protection. It flowers in April and May. *Ribes*, from an acid plant, mentioned by the Arabian physicians.

7. *Stigmaphyllon aristatum*. Decandria, Trigynia. Malpighiaceæ. A handsome stove climber; native of South America. Flowers: yellow, an inch across. It blooms from June to August. Readily propagated by cuttings. Grown in Mrs. MARRYATT's collection at Wimbledon, under the name of *Banisteria auriculata*. *Stigmaphyllon*, so named in allusion to the singular circumstance of the stigmas of this genus being expanded into a sort of leaf.

8. *Oncidium ciliatum*. Gynandria, Monandria. Orchideæ. This plant is probably not uncommon in some parts of Brazil. It is cultivated by Mr. KNIGHT, Chelsea Nursery; also in the garden of Sir CHARLES LEMON, where it has been cultivated for the last three years; flowering in November. It will grow in a hot damp stove, but requires to be tied to a piece of the branch of a tree. *Oncidium*, from *Oghidion*, a tubercle,—two prominences on the lip of the flower.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s.; plain,
2s. 3d.

1. *Rosa indica*; var. *nivea*. White Noisette Rose. Icosandria, Polygynia. Rosaceæ. Imported from France by Mr. DENNIS, under the name of *Amie Vibert*; in whose nursery, at Chelsea, it flowered in July last. It is doubtless a hybrid production; most probably originated between *Rosa indica* and *moschata*. It is an extremely free flowerer, often bearing from forty to fifty blossoms in a cluster, and on account of most of the young shoots running to flower, cuttings are obtained with difficulty. It requires a rich loamy soil, is increased by cuttings, and requires the same treatment as the common Noisette Rose. *Rosa*, from *Rhod*, red, colour of the flowers.

2. *Adesmia viscosa*, Clammy Adesmia. Decandria, Monogynia. Leguminosæ. It was raised from seeds, received from Chile in 1832, by Messrs. ALLAN and ROGERS, in whose nursery, at Battersea, it flowered in August last. The present is, perhaps, entitled to be regarded as the most showy of the whole genus, the flowers being double the size of those of most of the other species, and of a rich gamboge yellow. It forms a small shrub, which succeeds best in a light loamy soil, and may be increased by cuttings, or by seeds; it requires the protection of a pit, or frame, in winter. *Adesmia*, from *A*, without; and *desmos*, a bond,—alluding to the stamina, which are free.

3. *Dianthus Libanotis*, Lebanon Pink. Decandria, Digynia. Caryophyllæ. This rare and very distinct species was discovered on the lofty mountains of Lebanon, by LABILLARDIERE, who has given a very faithful representation of it in his *Icones Plantarum Syriæ Rariorum*. A plant, almost the only one yet in cultivation, was raised in 1831, from seeds received by Mr. LAMBERT, from Dr. FISCHER, of the Imperial Botanic Garden at St. Petersburg; and which blossomed at Boyton in August last. The plant is a hardy perennial,

growing well in a light loamy soil, and is sparingly increased by cuttings. To its late period of flowering is most probably to be attributed the circumstance of its never having yet perfected seeds in cultivation. The Greek name *Dianthus* bears the same meaning as the Latin *flos Jovis*, and is compounded of *dios*, God, and *arhos*, a flower, literally "divine flower," so termed on account of the extreme beauty of the flowers.

4. *Sollya heterophylla*, Various-leaved Sollya. Pentandria, Monogynia. Pittosporum. This handsome evergreen twining shrub is a native of Van Dieman's Land, where it was originally detected by LABILLARDIERE, who has given a figure of it in his work on the plants of New Holland. Although usually treated as a greenhouse plant, it proves to be nearly hardy; and when planted against a wall, with a favourable aspect, it will be found to thrive even more vigorously than if kept in the conservatory. The one in Mr. KNIGHT's nursery is placed against the west wall of one of the houses, where it has attained the height of six feet, and is annually adorned during the summer and autumn months with a profusion of its brilliant azure-blue blossoms. It requires a soil composed of peat and loam, and is readily increased by cuttings. Named by Dr. LINDLEY, after RICHARD HORSMAN SOLLY, Esq., F.R.S., and L.S., &c.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON THE CULTURE OF ALSTREMERIA LIGTU.—Your useful and widely circulated work seems a proper medium for an inquiry as to the best mode of treating *Alstremeria Ligtu*, so as to ensure its flowering.
Feb. 14th, 1831. A CAMBRIAN.

ON THE AURICULA, &c.—I shall be extremely obliged if you, or any of your correspondents, will inform me how long the composts for the Auricula and Polyanthus should be made up before using, and the best time for making them up; also, how long the compost for Pink beds should be made up before inserting the plants, and how far the plants should be set apart. Should this meet the eye of your correspondent Mr. J. REVELL, perhaps he will be kind enough to inform me respecting the Pink beds.
D. P.
Kennington, February 26th, 1831.

ON FLOWERING MYRTLE TREES, &c.—I shall be much obliged by you, or by any of your correspondents, informing me of the best manner in which to make Myrtles flower. I have several fine healthy plants in large pots, but they never flower. Also, how *Heliotropes* should be treated? An answer to these questions will very much gratify me. I am charmed with your *Floricultural Cabinet*.—I beg leave to add, that one of your correspondents advises *Lobelia Cardinalis* plants to be taken up and housed every winter. My plants are left out every winter, and they increase rapidly, and flower very finely. The situation of my garden is in a very high part of England, and much exposed to high winds: it is, in fact, accounted a cold situation. MYRTLELLA.

ON CULTIVATING THE ANEMONE.—Can you, or any of your readers, inform me of the best method of cultivating the Anemone, and also of raising it from seed?
Feb. 20th, 1834. A CONSTANT READER.

ON RAISING THE ROSE FROM SEEDS.—Would you, or any of your correspondents, be kind enough to inform me of the best way to raise the seeds of a very beautiful Rose, which I have in my garden. I have not been able

to save one pod of seed; but if I succeed in raising them, and find the plants to be worth any thing, I shall have much pleasure in sending you a few.

Feb. 18th, 1834.

A CONSTANT READER AND SUBSCRIBER.

P.S. I am trying the plan of pouring milk (instead of water) on some Auriculas, and shall soon be able to tell you how I succeed.

ON DESTROYING SLUGS, &c.—I shall be much obliged by your opinion as to the best mode of destroying Slugs in Carnation frames, without injury to the plants. Owing to the mildness of the winter, Slugs have been more numerous than I ever recollect them to have been.

Near Bradford, Feb. 17th, 1834.

AN OLD CARNATION GROWER.

ON THE CULTURE OF AGAPANTHUS UMBELLATUS.—Being a constant reader of your most excellent Work, the *Floricultural Cabinet*, I shall feel much obliged if you, or any of your correspondents, will inform me, through the medium of its pages, the best method of keeping and treating that beautiful plant, the Agapanthus umbellatus. Having purchased a fine young plant, I was advised to re-pot it into a larger pot, and to use two-thirds sand and one of loam; also to keep it well supplied with water, as it would live in water alone. This I attended to, and it bloomed the first year, but not since; which I apprehend is an improper method, as it has gone into three large roots, besides many small ones I have taken away. The water, I conclude, forces it into offsets and foliage. It being a plant I much admire, I should be glad to know a proper treatment for it, also the compost.

A SUBSCRIBER.

ANSWERS.

ON FLOWERING THE DOUBLE POMEGRANATE, &c.—A Correspondent in your February Number asks, Which is the best method of producing flowers of the Double Pomegranate? We have found, that so long as the tree is pruned it will not blow; but when permitted to grow wild, it yields the most profuse bloom. From the 1st of June last summer, till November, our tree was covered with blossoms, and we never had one while the knife was used.

In a former Number, a Correspondent, I remember, asks how the Gentianella is made to blow well. I have found that profuse watering will have that effect.

And now, perhaps, some of your Correspondents will kindly tell me how to make the Bignonia blow!

B. E.

ON DESTROYING ANTS.—Being from home some time, I had not the opportunity of reading my December Number, in which I perceive a Query respecting Ants; and if you think my experiment likely to be of any utility, or worthy of insertion, I shall feel very glad in having it in my power to tender a trifle to so generous and valuable a Work. I have a large garden, two-thirds of which is a kitchen garden, the other a flower garden. I had some valuable apple trees in the larger one, from which, for three years, I could obtain no fruit; the bloom was abundant, but as soon as it set, and got a little size, it nearly all fell off; and on very strict observance one day, I perceived the trees were all infested with thousands of Ants; and on speaking of it to a clever old gentleman in gardening, he said that tar was the only preventative to those insects, and that I must tar the trees about three or four feet high from the ground. Accordingly, the next day, I had it attended to, by having a pot of tar brought into the garden, and an old paint brush; fearing this might injure the bark of the tree, I had a ring made of it quite round the trees next the earth; and when it was getting dry, had a ring pressed down hard on the earth, close to the tree, which answered as well. I soon perceived the Ants would not touch it; the smell seemed to annoy them, for scarce any were caught on it. The next thing was to destroy the insects; and as I knew lime would kill small insects, I had a large tub of lime (finely sifted with a hair sieve) brought and kept there; their haunts are easily traced, but will require for the first time dressing, a man and a boy. Where there is a great quantity of these marauders, they make their roads, and very frequently

across the paths, which is soon perceived, which will direct you to their haunts. Where they enter, by small apertures in the ground, having ready a sieve full of lime, and a water-pot full of strong lime water, take a spade and gently turn up the earth till you come to the Ants, which will be found in immense numbers; sift the lime over them immediately; this confuses them. Rake the earth on them quick, and water over well with the water pot; this first dressing is some trouble, but afterwards a boy can do it as well, if shewn how to leave the earth neat. The next summer we pursued the same plan, but did not find half the number of insects, and the next a very few; and afterwards had no further annoyance from them, but plenty of fruit. The white currant trees they attacked, when in full bloom, which nearly all fell off; the flowers did not suffer much from them, except the succulent kind. As to Balsams, I could not get one to bloom; in my observations of them, I perceived they attacked the stalk of the fruit or flower, next to the tree, and by sapping out the juice which should nourish the fruit or flower, caused it to decay and fall off. Upon taking up some of the fresh-fallen apples, and cutting through the stalks, I found them dry and spungy.

A SUBSCRIBER.

REFERENCE TO PLATE.

1. *Lupinus mutabilis*; var. *Cruckshankii*. This very beautiful and showy variety was discovered by Mr. CRUCKSHANKS, not far from Pasco, on the Peruvian Andes, near the limit of perpetual snow. The plant is only biennial, but assumes an arborescent habit; and, if kept in the conservatory, will continue to flourish for several years. It is increased by seeds.

2. *Thysanotus junceus*; Rush-like *Thysanotus*. Hexandria, Monogynia. Asphodelaceæ. A native of New Holland, growing near Port Jackson. The flowers open only once, remaining for a few hours, but more are produced for a considerable time in succession. The plant must be kept in an airy greenhouse, potted in sandy peat earth.

3. *Tropæolum pentaphyllum*. This has been lately introduced from Buenos Ayres. It produces abundance of flowers during summer, climbing two or three feet high. It has a tuberous root, and requires the greenhouse protection. Increased readily by cuttings. Requires a rich loamy soil.

4. *Nierembergia ficautis*; Slender-stemmed. This is a pretty and entirely new species; we presume it is a native of Mexico. Mr. TATE flowered it in May 1833. It is a greenhouse perennial, easily multiplied by cuttings, and requires but a moderate degree of protection in winter, provided it is kept in an airy place.

5. *Chorizema spartioides*. A native of New Holland; raised by Messrs. LODDIGES from seed in 1832, and flowered most abundantly the following spring, the plants being two or three inches high, and the flowers large and splendid in colour. Requires to be kept in the greenhouse; increased by cuttings; potted in sandy peat soil.

FLORICULTURAL CALENDAR FOR APRIL.

PLANT STOVE.—Still support the requisite degree of heat by fires at night, as the plants will now begin to show their blossoms, which should be encouraged as much as possible at this season. Fresh air, when the weather is favourable, is very necessary, and should always be admitted when required; this will greatly assist their flowering, and cause the new shoots to be strong and healthy. This month is the most proper time to pot such plants as may require it, taking great care to use such compost as is congenial to them. Any that do not require shifting into larger pots may have the surface soil renewed with fresh compost, which will greatly invigorate them, and also add to their neatness. The same directions respecting watering and cleanliness may be observed, as given last month. Still propagate all kinds of exotics by means of seeds, cuttings, layers, or suckers, according to the nature of the

different kinds; insert them in pots, and plunge them in hot-beds, which will promote their vegetating and rooting quickly and certainly.

GREENHOUSE.—These plants will now require large admissions of air at all times when the weather is mild, for as most of them will now be shooting freely, they must not be kept too close. The plants must now be looked over, to see when water is wanted, and let all the plants be properly supplied therewith, as this is now a very necessary article, particularly when they are in the house; be careful of the succulent kinds. Let no decayed leaves or shoots be allowed to remain, but let such be taken off as soon as perceived; and all shoots that are of a weak straggling growth must be pruned more or less, as appears necessary. Let no weed, moss, or litter, be seen on the tops of the pots and tubs; and if any foulness be contracted on the plants, let it be instantly removed. Inarch shrubby exotics of any particular kinds—sow seeds in pots, placing them in a hot-bed; sow seeds of orange, lemon, &c. for stocks; also propagate by cuttings, layers, or otherwise, and if placed in a bark bed in the pine-stove or hot-bed, they will be greatly facilitated in their rooting.

PLEASURE GROUND, FLOWER GARDEN, &c.—Plant out in a gentle hot-bed, all kinds of tender and half-hardy annuals, raised from seed the two last months; also sow more seed to succeed them; a little air should regularly be given to prevent the plants from being weakly. Hardy annuals may still be sown in the borders or other parts of the garden, where they are to remain. Sow Ten-week Stocks and Mignonette in pots for rooms, and borders for nosegays. The more curious and valuable varieties of Hyacinths, Tulips, Ranunculuses, and Anemones, which are planted together in beds, require particular attention, or heavy rains, cutting winds, and sharp frosts, will do them much harm; and the sun, if permitted to shine on them fully, will bring on the decay of their blossoms in a short time. The best Carnations in pots should have a good share of attention, and their growth encouraged as much as possible; as their flower-stalks advance in growth they should be carefully tied up to neat sticks; keep the pots perfectly free from weeds, and the plants from decayed leaves; those not yet planted out in pots, beds, or borders, where they are to remain, should now be done. Sow seeds of both Carnations and Pinks. Polyanthus may still be planted, also increased by sowing the seeds and by rooted slips. Give fresh earth to such pots of perennial plants as may require it. Many kinds of perennial and biennial plants may still be planted, and also increased by seeds, offsets, &c. Auriculas will now begin to blow; care must therefore be taken to protect the more valuable sorts in pots from rain, wind, and too much sun. Evergreen trees, and flowering shrubs, may yet be planted, and the sooner the better. Grass walks, lawns, and other compartments of grass in the garden, should be rolled. Box, Thrift, and other edgings may still be planted; they will root readily if in dry weather they receive a supply of water occasionally. Where any edgings have become disordered through age, &c. let them be taken up, slipped, and replanted. All flowering plants should be attended to, and all straggling, broken and decayed shoots should be taken away at all times. *Tigridia pavonia* should now be planted in pots or borders; the soil should be a rich loam. *Hepaticas* should now be divided; *Lobelias* should be planted out in pots and borders; *Pansies* should now be propagated by young shoots or slips, which should be pricked out under hand-glasses, and well watered; they will soon strike root, when they should be planted out into beds where they are intended to flower.—In watering tender annuals, care should be taken to give it in a tepid state, and if possible, to pots, to flood them over the surface of the soil, and not over the tops of the plants, or they will be liable to rot, particularly Ten-week Stocks, &c. &c.—Some of the early-sown tender annuals will now require to be potted off, using rich soil.

HYDRANGEA.—Plants that have plump end buds, may have the shoots cut off a few inches long, and one inserted in a small sixty pot struck in heat, and afterwards re-potted; such will bloom singularly fine and unique. One-twentieth of steel filings in the soil will cause them to flower blue.

F. F. A.



Salpiglossis linearis



Spiraea grandiflora



Ipomoea rubro-venosa

J & J Baran Sculp

Engraved for the Floricultural Cabinet

THE
FLORICULTURAL CABINET,

MAY 1st, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On Raising Seedling Ranunculuses.* By
the Rev. JOSEPH TYSO, Wallingford, Berks.

Permit me, through the medium of your very interesting *Florist's Magazine*, to reply to the Queries of your respectable Correspondent, the Rev. S. WIGG, of Leicester, relative to my method of raising Seedling Ranunculuses.

1st. The flowers which are proper to be impregnated, are those which have good properties, and produce pericarps, especially the following:—

Dark.—Admiral Keppel, Hanno, Kempenfelt, Naxara, Niobe, Quixos, Roi de Mauritanie, Variat, and Viola la vrai Noir.

Edged.—Agricola, Artificial, Dr. Franklin, Hen de Fontenoy, Flavimorus, Galitzin, Grand Beyer, Grand Monarque, Horatio, Julius, Louisette, Nestor, Rose Incomparable, Tendress, and Venus.

Spotted.—Andrew, Arbrisseau, Benjamin, Cremona, Esther, Fabius, Flora, Isodorus, Lord Cochrane, Pourpre Panache, and Princess of Wales.

Striped.—These flowers seldom produce pericarps, yet I have seen Melange in a state to be impregnated, but no other good flowers in that class.

Mottled.—Cora, Earl of Coventry, and particularly Thompson's Queen.

Selfs.—Any crimson, scarlet, white, or yellow, that shows the eye or pericarp.

2nd. The kind of flowers proper for impregnation are semi-doubles of good properties as to colour and shape of their petals. The more double the flowers are from which the farina is taken, the greater is the probability of obtaining fine double varieties. The perfection of the art of raising seedlings consists in having some of the best show-flowers of each class, which produce a pericarp or seed-vessel—namely, dark, white, scarlet, crimson, yellow, striped, edged, spotted, mottled, olive, &c. &c., and a number of the best semi-doubles of each corresponding class, producing anthers as well as pericarps. If a new flower of any particular class is desired—for example, yellow-edged,—fertilise Julius or Grand Monarque with the pollen of a yellow-edged, semi-double, or nearly double flower, of first-rate properties. A similar method must be pursued in order to obtain a superior flower of any other class.

3rd. The time and manner of performing the work of impregnation.—Commence the operation when the flowers are in perfection. The time of day—from ten o'clock in the morning until two or three in the afternoon, in fine sunny weather. The most approved method is to gather the semi-doubles, and bring them in contact, by lightly pouncing the pericarp of the flower from which you intend to save seed. If semi-doubles are scarce, it may be performed with a large camel's hair pencil. Repeat the operation once or twice a day, until the petals decay or fall off.

4th. The future management of the impregnated seed-vessels.—Tie them to small sticks, with two or three bandages of matting, to prevent the stalk from breaking: they seldom want any other care. When they turn brown, gather them and dry them in the shade.

5th. The compost I prefer is rich garden earth, mixed with one-fourth of loam, but no dung. I generally sow in boxes 18 inches by 11, and 5 deep. A butter-tub cut in two, and iron bound, does as well. I have sown in Carnation pots, but prefer *boxes*, which I fill with the above compost, press the surface level, then sow the seeds about an eighth of an inch apart, and water it to make it lie flat. I then sprinkle it with *dry mould*, just sufficient to cover the seeds, and water it with a fine rose or syringe,

discharged in the air, so that the water may fall lightly on the surface. I put the boxes under a north wall, and protect them from heavy rains. The best times of sowing are the middle of October, or early in January; the seed will come up in a month or five weeks. They should be put in a cold frame in frosty weather, but, at all other times, should have constant exposure to sun and air. Clean the boxes from green moss in February, and top-dress them with dry mould. About the second week in May, plunge the boxes up to the edge in the open ground, where they have only the morning sun; water them daily until the grass withers, then let the boxes become quite dry, and about the middle of July take them up, dry them gradually, and keep them in a box in dry sand. I plant them in February, and treat them as I do the old roots. They will flower in great profusion in the following June.

I am confident that, if florists would adopt this method, more than half the old flowers would soon be thrown into mixture. Much has been done in raising seedling Tulips, Carnations, Pinks, Auriculas, and Polyanthuses; yet comparatively little has been done in the culture of the Ranunculus, though it excels all other flowers in the symmetry of its shape, and in the brilliancy and variety of its colours. A bed of choice Ranunculuses presents one of the most attractive objects Nature can exhibit in her gayest mood. There you behold black, purple, and violet of every shade, mingled with others as white as snow. There you see crimson, red, and rose, of various tints; orange, yellow, and straw, of every dye. Many are striped as distinctly as the Carnation: some are red and white, and others scarlet and gold. Numbers are edged like the Picotee, having white, buff, or yellow grounds; others are shaded, spotted, or mottled, in endless variety. The sight of such a collection instantly fills the spectator with admiration and delight.

Wallingford, Feb. 14th, 1834.

JOSEPH TYSO.

ARTICLE II.—*On the Culture of Salvias as Border Plants.* By A JERSEY GARDENER.

As there has been but little said, in the *Florist's Magazine*, on the culture of the various kinds of Salvias as border plants, I

venture to offer a few remarks : as there is no class of plants more beautiful, nor of easier culture, if rightly managed ; and if turned out in a clump, with the sorts well contrasted as to size and colour, nothing can exceed its beauty at this season of the year, when there are so few other flowers in bloom. I have had the following sorts in bloom, more or less, this four months past, and now (the middle of November) they are most of them in full bloom—viz. *Salvia splendens*, *formosa*, *pseudo*, *coccinea*, *Grahamii*, *Chamedroides*, *involucrata*, *cardinalis*, and *Doliestachya* ; all of which, with the exception of the three first sorts, are hardy enough to bear a mild winter in the South of England, in a sheltered situation. But as it respects the general propagation of this beautiful genus of plants, I cannot do better than refer your readers to the advice given by Mr. SHORT, in Article V., page 9, Vol. I., “On the Culture of *Salvia Africanus*,” as the same treatment is applicable to nearly all the sorts, where there is the requisite conveniences. Although Mr. SHORT considers it a treatment peculiar to itself, I have never found any difficulty in cultivating nearly all the sorts by this mode.

I presume there are but few gardeners at the present day, with those conveniences about them, who have not a knowledge of this old system ; but I think it behoves every one, not only to rise far above the level of that system, but also to simplify the art of Gardening as much as possible (where their interest is not at stake) ; so as to bring it within the reach of every industrious cottager, that his little garden may be decorated with those more splendid flowers, as well as that of his richer neighbour : for all the above-mentioned sorts can be abundantly obtained, by adopting precisely the same plan as recommended by me for *Fuchsias*, in Article IV., page 197, Vol. I, excepting *involucrata*, which is herbaceous, and can be easily obtained by parting the roots in the month of May : so that, by the above treatment, every cottager, as well as every gardener, may, without the aid of a hot-bed, obtain a sufficient number of plants to put in pots, and keep in his frame or window, as a stock of reserve through the winter months ; for, if in case the winter should prove severe, there will be always a young supply to fill up the vacancies in the month of May.

I should be much obliged to you, or any of your correspondents, for information as to whether the *Salvia* in the drawing here

subjoined is generally extant in England, and if so, under what name; for Mr. SAUNDERS, florist in this island, received the parent plant a few years ago from England, under the name of "Sal. coccinea of Linn." But Don MARIANO LA GASCA, late Professor and Director of the Royal Botanical Gardens of Madrid, on seeing it last year, told me it was evidently not coccinea, but *Doliestachya* of his *Elenchus*, H. R. M., which he described and denominated 29-30 years ago in the Royal Gardens of Madrid; and if it is not intruding too much on your pages, I will give a brief account of the history of this interesting species, as I believe it has never yet been published. Professor LA GASCA says, the first seeds were brought to him from Mexico, by the late authors of *Flora Mexicana*, the celebrated Doctors Don MARTIN DE SESSE and Don JOSEF MARIANO MOCINO, in the year 1802; and also from seeds sent about the same period, by the late Don VINCENTE CERVANTES, then Professor of Botany in the University of Mexico. From that time, he says, its seeds were sent to many botanical gardens in Europe, and probably to Mr. LAMBART, and to the Kew Gardens. He published only the name, at page 13 of his *Elenchus*, and only by oblivion, the description of this plant was omitted in his *Genera et Species quæ ant novæ Sant*, &c., which accompanies his *Elenchus*; and we are indebted to him for the preceding historical account, as well as for the subjoined Latin specific phrase, and short comparative description.

"*Sal. Doliestachya*; foliis cordatis ovato lanceolatis acutis crenatis, supra rugosissimis, glabrescentibus, subtus ad nervos precipue. Puberulis sessilibus, pseudo-verticillis subdiodecimis. Floris in racemum elongatum terminalem Digestis: bracteis caducis, calycis labio superiose ovato acute apiculo brevissimo incurvos; corola subglabra."

Salvia Doliestachya.—LA GASCA'S *Elenchum*, H. R. M., page 13.—"Abasque descriptione—Folio colore, virida flavicante, nec intense viridia corolla coccinea, fulgentes, calyce subtriple longiones glabræ, galeatantum apice subhirsutum verticillis sæspesæpius, 12 flori."—*La Gas. MSS.*

This new and beautiful species of *Salvia* grows with us from five to seven feet high, and is a handsome bushy plant. It grows wild in the valley of Mexico. At first sight it has the appearance of *Sal. fulgens*, Cav.; but it differs from that in being

twice as high, while the scarlet flowers are only one-third its size, and smooth, except the galea, or upper lip, which is somewhat shaggy; the middle segment of the lower lip kidney-shaped, a great deal larger than the two lateral ones; emarginate leaves, very rugose on the upper surface, and broader; the sinus at the base deeper, and the two uppermost sessile; the flower-bunches longer, with from seven to twenty apparent whorls of pedicellated flowers, each of them with ten or twelve flowers, generally twelve; the upper lip of the calyx ovate, acute, with a very short incurved point.

I have no book or specimens to compare this plant with *Sal. pulchella* Decan. and *Sal. machrostachya* Humb. et Bomp., to which it seems somewhat alike. According to M. LA GASCA, it was cultivated in the open air in the Royal Gardens at Madrid, from the year 1814; but the severe frost of December destroyed its tender annual shoots. Mine were not at all affected by the frosts of last winter.

A JERSEY GARDENER.

P.S. Plants of this beautiful *Salvia* are now selling by Mr. B. SAUNDERS, florist, Jersey.

[An Engraving of this species is in hand.—COND.]

ARTICLE III.—*On the Culture of the Garden Anemone (Anemone hortensis)*. By INNOVATOR.

At the request of your Querist "B. C. L.," I forward you my most approved plan of cultivating that beautiful, but much neglected flower, the Double Anemone. It is astonishing that it is not more generally grown, as its culture is easy, and it invariably repays us with a profusion of bloom. The practice that has answered my most sanguine expectation is as follows:—About the last fortnight in September, take out the natural soil of the bed to the depth of eighteen inches; in the bottom lay a layer of cow-dung three or four inches thick; then fill up the bed to within an inch and a half of the surface, with the following compost:—Take of thoroughly rotted cow or horse-dung, leaf-mould, and heavy loam, of each six barrowfuls; white pit sand, two barrowfuls,—which mix well together. Let the bed lay to settle till the middle of October; when, having raked over the surface,

the tubers may be planted upon it, in six rows, six inches apart from root to root: this distance is absolutely necessary, to allow room for their fine flowers to expand and show themselves. Cover each tuber with a little white sand, and fill the bed level with the surface with light sandy loam; compact the surface with the back of the spade. Protect them from heavy rains, or severe frost, by straw mats, supported from the surface of the bed by a wooden frame, made like the roof of a house; but do not continue this covering only when absolutely necessary, as nothing is so hurtful to them as confined air. Shade them with an awning from sun and rain when in full bloom, and give them rain-water every other day, poured between the rows. As soon as the bloom is over, cease to give water, and admit all the sun possible, but not a drop of rain—as the quicker vegetation is destroyed, the better will be the bloom next season. Take up the roots as soon as the grass dies down. They will answer nearly as well grown in 32-sized pots, using the same compost, and plunging the pots in cinder-dust. They are a cheap flower. All the best sorts under name may be had of Mr. GROOM, florist, Walworth, at about 10s. 6d. per dozen.

INNOVATOR.

ARTICLE IV.—*On the History and Culture of the Tree Pæony.* By AN ARDENT AMATEUR.

Pæony belongs to Polyandria, Digynia—Linn.; Ranunculaceæ, nat. ord. *P. officinalis* has been in this country ever since 1562: it is a native of Switzerland. *P. corallina* is a native of this country; but the only place where, to my knowledge, it is found wild, is the Flat Holmes, a rocky island in the Bristol Channel, which, by-the-bye, is noted for its natural productions. PLINY mentions the Pæony as one of the first known plants, and that it was called after PÆON, a physician, who is mentioned by HOMER, in his *Iliad*, 5th book, 900th line, when MARS had been wounded:

“ Thus he who shakes Olympus with his nod,
 “ Then gave to Pæon’s care the bleeding god :
 “ With gentle hand the balm he pour’d around,
 “ And heal’d th’ immortal flesh, and clos’d the wound.”

PLINY also says, that it was called Pentoberan and Glycisides by

some; but these names seem to have been soon dropped. Mountan is a Chinese word for this particular variety of Pæony, which was introduced by Sir JOSEPH BANKS from China, in 1794; but, although introduced then, for the first time, it had been long known by hearsay—its beauty had been extolled, and its magnificence exaggerated. At first, £100 was thought a fair price for it; and in China, plants of the choice sorts were sold at a high price. It is a most magnificent plant, and valuable—as, with the protection of a wall or a hedge, or even wicker-work, it will flower profusely in April, May, and June, and stand our winters. The difficulty of propagating it with success occasions it to be sold at a high price. *P. papaveracea* generally costs from 15s. to 20s. the single plant.

To those who are desirous of propagating this handsome plant, I recommend the following operations, all of which I have tried, and very generally with success:—When the Pæonies are budding (that is to say, about February), a ring of bark, about one-sixteenth of an inch wide, should be cut out all round the stem, above and below each bud on the stem or stems of the plant to be operated upon. The sap being obstructed in this manner, lay the branches, leaving the leading shoot at the end only above the ground. Five or six months after, the buds will be seen to have made vigorous shoots. The earth may then be removed, and each bud, with its fibres, separated from the main layer by taking the shoot off with half the stem attached to it. The whole length of the stem being still entire, it may be replaced in the earth again; and a fresh set of young shoots, more plentiful than the first, may be expected.

I have also tried grafting with success. The operation is the same as with Dahlias—namely, a portion of the stem is inserted into one of the tubers of the same, or any other variety of Pæony.

Cuttings will also strike in light rich soil, in the shade, without cover; but I have never been very successful in that mode of propagating this plant. If they are inserted into the soil about three inches below the surface, and plunged in a slight hotbed, they will soon show themselves above the ground, and make fine plants; but it is always a practice with me, to plant only one-half of the stem, splicing it longitudinally.

By these various ways, this beautiful plant may be propagated

abundantly, and will most likely be the means of lessening the expense, which at present must prevent many from possessing it.

AN ARDENT AMATEUR.

ARTICLE V.—*On the Culture of Gloxinias.* By Mr.

THOMAS APPLEBY, Gardener to the Rev. J. A.

RHODES, Horsforth Hall, near Leeds.

In reply to Mr. B. DENTON, I send you a few remarks on the culture of some species of Gloxinias, as greenhouse plants. To cultivate these charming plants in a greenhouse, the following method will be found practicable :—

In the spring, as soon as they begin to push out shoots from the bulbs, shake them gently out of the soil, and pot them in a rich light compost, well drained with small broken pots—the size of the pots not to exceed one inch more than the diameter of the bulb. Give a gentle watering, and place them in the warmest part of the greenhouse. Be careful not to over-water, until the plants are of a considerable size ; they may then be more freely watered, and will require larger pots. I generally flower them in pots six inches wide at top, and eight deep.

When the greenhouse plants are removed into the open air, the internal heat may be increased ; the Gloxinias will then grow rapidly, and will require a proportionate increase of water. Occasionally it will be advantageous to give them manure in a state of solution. *Every day sprinkle them gently on the whole herb with clear soft water*, from a syringe, or the fine rose of a watering pan. When, on account of frost, it is needful to bring in the greenhouse plants, the sprinkling must be omitted, and the quantity of water given every time reduced, until they are almost dry. Place them on a dry, airy shelf. Clip (not pull) of all decayed leaves as they occur ; but never suffer the soil to become dust dry, as, if that be the case, the bulb will become farinaceous, and when watered in the spring, will rot.

The following species may be grown, and will flower, by the above treatment :—*Gloxinia hirsuta*, *caulescens*, *candida*, *speciosa*, and *speciosa alba*.

Gloxinia maculata cannot be grown in a greenhouse to flower :

VOL. II.

P

it is decidedly a stove plant, and requires great heat and moisture to flower it to perfection even there.

Jan. 7th, 1834.

THOS. APPLEBY.

ARTICLE VI.—*On Compost for Carnations.* By Mr.
J. BANTON, near Oakham, Rutland.

Being convinced of the utility of the following method, I offer it to your notice for the use of such of your readers as may be disposed to try it. The chief thing in which I differ from most others whose methods of preparing compost I have seen, is the substituting turf-ashes for sand. This I find to be much preferable; and I have no doubt it will be found the same by all those who, like me, are obliged to use cow-dung as the principal article in their compost: by cow-dung, I mean the manure formed by the dung and litter thrown from the cow-house, which should be at least one year old before it is used. The cold, heavy nature of this manure is corrected by the contrary properties of the ashes. My method is as follows:—"In March or April, I take some turf from the best ground I can, considering that the fatter the soil the better will be the ashes. I do not take it more than four inches deep; and as soon as the turfs are in order, I burn them. When I consider that I have a sufficient quantity of ashes, I mix them as hot as possible with my cow-dung and loam. As to the precise quantity, I am not very particular: much depends on the nature of the loam; and a trial or two will easily determine the proportion. Of our red earth, I allow about one part to one part of ashes, and two parts of dung. This compost should be turned and mixed at least once a fortnight in summer, and once in three weeks or a month in winter: for, notwithstanding all that has been said about the winter preparation of soil, I believe one summer to be worth two winters for the purpose. I do not find it necessary to use quick lime in this compost, though, when I used sand, I thought lime indispensable. The wire-worm I have not seen in the compost, as I now use it; yet I am by no means prepared to say, that that formidable enemy of the florist will not attack plants growing in it. After twelve months' preparation, it will be fit for use. Turf-ashes are used by other florists in the

neighbourhood besides myself, though not in quite the same manner; yet all those that use them speak well of them.

J. BANTON,

Leigh, near Oakham, Rutland, Jan. 9th, 1834.

ARTICLE VII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*

By ST. PATRICK.

(CONTINUED FROM PAGE 88.)

NAMES.	DESCRIPTION.
416 L'Ebloassante vierge.....	Very large bright blush.
417 Lebrée.....	Large bright red.
418 Le Grand Duc.....	Light purple.
419 Leicester.....	Small pale pink.
420 ————Crimson.....	Beautiful light crimson.
421 Le Marquis.....	Fine scarlet and blush.
422 L'Enchanteur.....	Fine pink.
423 L'Enchantresse.....	Bright deep pink.
424 Le Plus jolie coup d'œil.....	Fine bright red, changing pink,
425 Les étoiles garnis.....	Crimson blush.
426 ————trois nages.....	Very fine white.
427 L'Etoile rouge.....	Large red.
428 L'Illustre.....	Large bright red pink.
429 ————Cavalier.....	Beautiful bright red.
430 ————Champion.....	Mottled purple and scarlet.
431 L'Obscurité.....	Very deep red.
432 ————.....	New—Small dark purple.
433 Lodoiski.....	Pretty light pink.
434 L'Ombre parfait.....	Dark shaded purple.
435 London Pride.....	Very fine fringed dark.
436 Louis dix.....	Pink and purple.
437 ————nouveau.....	Immense large bright red.
438 ————huit.....	Fine red.
439 Louis seizième.....	Very large fine pale red.
440 Lucrece.....	Small early blush.
441 Macbeth.....	Small crimson purple.
442 Macriflorum.....	Superb large blush.
443 Maculata.....	Fine mottled light red.
444 Madame Lavalette.....	Large deep scarlet.
445 ————Salvin.....	Beautiful bright red.
446 Mademoiselle.....	Small pretty bright red.
447 ————Caroline.....	Very pale purple.
448 ————Charlotte.....	Fine bright red.
449 ————de Berri.....	Fine pale blush.
450 ————d'Eufrasie.....	Very fine cream colour.
451 ————Esther.....	Large fine brilliant red.
452 ————Jencire.....	Very double red.
453 ————Julia.....	Beautiful deep blush.
454 Madiska.....	Fine curled deep red.
455 Magnifique.....	Large deep blush.
456 Maiden's Blush.....	New—Beautiful blush.
457 Malva brillante.....	Anemone flowered, fine deep blush.
458 Manteau rouge.....	Light crimson.

NAMES.	DESCRIPTION.
459 Margin hip	Beautiful semi-double cream colour, scarlet margin.
460 Marquis	Pinkish red.
461 Marquis of Tavistock.....	Fine light tinged crimson.
462 Marshallii	Pink and purplish crimson.
463 Martinez	Fine curled rich rosy crimson.
464 Masterpiece	Immense large red.
465 Maximo palira	Fine crimson purple.
466 ——— pourpres	Fine mottled purple.
467 May.....	Lilac blush.

(TO BE CONTINUED.)

PART II.

EXTRACTS.

Adam the Gardener. By CHARLES COWDEN CLARKE. London, 1834, pp. 279.

(CONCLUDED FROM PAGE 90.)

“ ‘In the course of your other engagements, Adam, do not forget your weeding. Your hoe and your fingers must both be busily employed throughout this month. The young weeds must be cleared from the beds of young plants, and the old ones must be cut down before their seed ripens; since the wind would then scatter it all over the garden, and your labour next year be greatly increased.

“ ‘While you are so employed, too, look round, and observe what annuals have ripened into seed; then cut them off carefully, and lay them upon a sheet under the shed in the sun. As soon as they have become thoroughly dry and hard, we will employ some evening in rubbing them out, and packing them away in parcels. We will also sow some corn-sallad for our winter and spring dinners.

“ ‘Every evening, so long as the winter continues dry, you may give each of the cucumber plants some water, and our crop will in consequence be the more abundant.

“ ‘I am not sure that I shall sow any more turnips this year; but I must make up my mind before the middle of this month, or it will be too late. You, however, may hoe that bed by the medlar-tree, where those young ones are; and thin out the smallest plants for the cow, leaving the larger ones at about six inches’ distance from each other.’

“ ‘One day, while they were at work, they noticed how much they were troubled by wasps: at his father’s desire, therefore, Adam filled some phials about half full of treacle and water, and hung them in various quarters of the garden, upon branches of the wall trees. The quickness with which these little creatures discover any sweet provision (of which they are very fond) is truly surprising. It is worthy of remark, that at dinner, during the fruit season, wasps rarely intrude at table till the pies are opened; when, in the course of two or three minutes, they will be found to have made their way into the room, and become one of the guests—though uninvited and unwelcome. Their scent is as keen as that of a blood hound.

“ ‘See if there be any manure water, Adam,’ said his father; ‘if we have none, get the two-gallon watering pots; dip some of the soft pond water, and

put a good handful of salt into each; and then give it to those vines against the house: in the mean time, I will be removing the young shoots upon them, above the fruit; and, after that, I will trim and dispose the peach and nectarine trees. Remember, also, with your hoe and rake, to clear and remove the weeds from the fruit-borders. A neat appearance is not the only benefit that will be derived from this step; but the fruit itself will be more quickly ripened, and its flavour improved, by the rays of the sun being reflected from the smooth surface of the ground.'

"They also, from time to time, attended to their flower garden; watering the annuals regularly, and putting sticks to support those which required them. Those perennials, too, in pots, that had done blowing, they cut down the stalks, and at the same time loosened the earth at the top of the roots, removing some of it, and replacing it with new mould. They likewise propagated many others by dividing the roots; such as the double rose champion, catch-fly, double scarlet lychnis, and double rocket, gentianella, and polyanthus. Their choicest auriculas they shifted into fresh pots, and sowed fresh seed in pots, sprinkling the seed closely, and covering it about an inch deep. They also transplanted bulbous roots, such as lilies, &c., and sowed some of the seed of the same. Young seedlings of wall flowers, stocks, sweet williams, and columbines, they transplanted out into the borders. This work they contrived when the ground was moist after rain.

"In the nursery ground they trimmed the evergreens, clearing the ground of weeds, and transplanting young seedlings; and those which had made strong shoots from the stems near to the ground, they cut away close off. Those trees which Mr. Stock had budded about three weeks or a month before, he loosened the bas that bound them, to prevent the bud from being too closely pressed, as the branches had swelled," &c. &c. &c.

Plants figured in the following Periodicals for April:—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's

• Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Amaryllis aulica*, Courtly Amaryllis. Class, Hexandria; order, Monogynia. Natural order, Amaryllideæ. It seems liable to much variation: the present is a splendid variety, with green lines in the centre, running nearly the whole length of each petal, which are of a fine red, with a very obsolete glandular disk, and with long, narrow, glaucous leaves. Another variety is the *platypetala* of Professor LINDLEY in the *Bot. Reg.* t. 1038; while our present plant seems intermediate between these and what is considered the type of the species. The bulb was presented to the Botanic Garden by — PEARSON, Esq., who brought it from the neighbourhood of Rio Janeiro, in Brazil, where it is a native. Amaryllis, a nymph of VIRGIL'S.

2. *Alyxia ruscifolia*, Butcher's Broom-leaved Alyxia. Pentandria Monogynia. Apocynæ. The present species was detected in New South Wales, within the tropics; to which, however, its geographical range is not limited—for, upon a settlement being established, some nine years since, at Moreton Bay, on the same line of coast, but in 27° S. latitude, it was found in the dense woods that clothe the banks of the Brisbane River, growing luxuriantly among great shade and but little light; yet, under these circumstances, bearing its flowers at the termination of each branchlet throughout the cooler season of the year. It was originally raised at Kew, from seeds gathered on those intertropical shores, in 1820; and from the Royal Gardens, other collections were enriched by it. It is a hardy conservatory plant, ornamental from its habit and dark foliage, and putting forth its fragrant white flowers (smelling like Jasmine) freely, and generally during the greater part of autumn. Alyxia, from the Greek *alyxis*, grief, anxiety of mind; in allusion to the deep sombre green of several of the genus.

3. *Alyxia Daphnoides*, Daphne-like *Alyxia*. Pentandria, Monogynia. Apocynæ. Plants of this very distinct Daphne looking species were introduced to the Royal Gardens by Mr. CUNNINGHAM, in 1831, where they soon afterwards flowered, and produced green fruit. It is remarkably hardy, simply requiring protection from frost, and is readily propagated by cuttings. It is a shrub of strong growth, inhabiting dry shaded woods on Norfolk Island, where it is by no means of frequent occurrence.

4. *Caladium fragrantissimum*, Delicious-scented *Caladium*. Monæcia, Polyandria. Aroidæ. This new species was introduced into the Liverpool Botanic Garden, from Demerara, by C. S. PARKER, Esq. Among other plants which invest the stems of trees in the forests of the tropics, the different species of *Caladium* constitute a striking feature, both in regard to form and colour. Some are stemless; others have long climbing stems, sending forth thick wiry roots, if they may be so called; for they seem rather calculated to imbibe nourishment from the surrounding atmosphere, than to fix the plant producing them to their place of growth. We are familiar with the general form of their inflorescence, from that of the *Arum maculatum* (or Wake-Robin) of our banks and hedges in England. The floral covering is generally of a pale and unobtrusive colour, and scentless; but in our species, and some others, it is in part richly tinged with red; and the whole inflorescence yields a fragrance, which, in the present species, can only be compared with that of the well-known *Olea fragrans*, but far more powerful.

5. *Ipomæa Horsfallia*, Mrs. HORSFALL's *Ipomæa*. Pentandria, Monogynia. Convolvulacæ. Seeds of the present species were received by CHARLES HORSFALL, Esq., either from Africa or from the East Indies, and raised by his very skillful gardener, Mr. HENRY EVANS, at Everton, where the plants produced their lovely rosy crimson-coloured blossoms in great profusion during the months of December and January (1833-4,) a season when so gay a visitor is particularly welcome to the stove. *Ipomæa*, see page 61.

6. *Lonicera Chinensis*, Chinese Honeysuckle. Pentandria, Monogynia. Caprifoliacæ. A native of China; and though treated at first as an inmate of the greenhouse, it proves to be perfectly hardy. It produces its beautiful fragrant flowers through a great part of summer and autumn. *Lonicera*, so named in honour of A. LONICER, a great German botanist, who died in 1586.

7. *Streptanthus obtusifolius*, Blunt-leaved *Streptanthus*. Tetradynamia, Siliquosa. Cruciferae. This species is a very showy annual plant, and was received, under the name of "Arkansa Cabbage," from the hot springs of the Arkansa territory. It is cultivated in the Glasgow Botanic Garden. It will no doubt bear the open air, though Mr. MURRAY has hitherto kept it in the greenhouse. Flowers: fine rose colour, with a very deep lake-coloured spot at the base of each limb. *Streptanthus*, from *Strepho*, to turn or twist; and *anthos*, a flower,—in allusion to the twisted petals.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Ph.D., F.R.S., L.S., and G.S., Professor of Botany in the University of London, &c. &c. Price 4s. coloured; 3s. plain.

1. *Cyclobothra alba*, White *Cyclobothra*. Hexandria, Trigynia. Liliacæ. A Californian bulbous plant, introduced by the Horticultural Society. It forms quite a new class of horticultural objects, of great interest; representing, at midsummer, which is their time of flowering, the Fritillaries and Tulips of the spring. They are probably quite as hardy as Tulips, like which they should be treated; unless it should prove that their bulbs are capable of living all the year round in the open ground, a property we can hardly anticipate, considering how dry and mild a climate is that of California, compared with England. In the Garden of the Horticultural Society, they have been planted in the open border, in a light loamy soil, in a cold frame, where they grew with considerable vigour, flowered beautifully, and produced abundance of seed. *Cyclobothra*, from *Kuklos*, a circle; and *Bothros*, a pit,—in allusion to the circular depression from which the petals distil honey.

2. *Cyclobothra pulchella*, Deep yellow flowered. Syn. *Calochortus pulchella*. Hexandria, Trigynia. Liliaceæ. We doubt whether this plant likes the climate of England so well as the last, for although it grew with apparently perfect health, flowered freely, and ripened its seeds under the same circumstances as *C. alba*; yet the specimens which were produced could not be compared for beauty with the wild ones sent home by Mr. DOUGLAS. The latter consisted of many-flowered and rather dense corymbs of flowers; but the cultivated plant hardly exceeded *C. alba* in the number of its blossoms. The flowers of this genus much resemble *Fritillarias* in form and habit.

3. *Cyclobothra lutea*, Pale yellow flowered. Hexandria Trigynia. Liliaceæ. Syn. *C. barbata*. When this plant was first introduced, it was supposed to be the same as the *Fritillaria barbata*. This pretty species of *Cyclobothra* was obtained some years since from Mexico, by Mr. TATE, and has now become dispersed through many collections. It appears to grow freely in a light mixture of peat and loam, and to require no other protection than a good pit.

4. *Echites stellaris*, Star-flowered. Pentandria, Monogynia. Apocynææ. A tender stove climber, introduced from Rio Janeiro to the Horticultural Society, by the Hon. ROBERT GORDON. In the month of August, its flowers perfume the part of the hothouse in which it is placed, with a delightful smell of Primroses. It grows readily in peat and loam, but is scarcely to be propagated except by cuttings of the root. Dr. LINDLEY has named it with reference to the coloured eye of the corolla, which, being deep rosy red in the centre, with five starry lobes, bordered with a sort of orange yellow, gives a striking appearance to the flowers. *Echites* is the Latin name of the Birthwort, one of the twining species of *Aristolochia*. Its meaning being "serpentine," from *εχίς*, a snake, LINNÆUS applied it to the present twining genus.

5. *Ismene Amancaes*, var. *sulphurea*, Sulphur-coloured Ismene. Hexandria, Monogynia. Amaryllidææ. This very ornamental bulb was raised four years ago from a seed of *I. Amancaes*, which had been fertilized by the pollen of *I. Calathina*. The colour of the flower is intermediate, and the scent, though very powerful, is not delightfully fragrant, as in *Calathina*, nor so disagreeable as that of *Amancaes*. *I. Calathina* thrives vigorously out of doors in a border of sand and peat mixed, and flowers in July and August, if the bulbs are planted out in April, and taken up when the leaves decay in November or October. The soil being loose and light, it is easy to avoid breaking their strong fleshy fibres, which should not be injured. The bulbs so taken up should be put altogether in a large pot, or a small tub, according to their number and size; and, some light soil being poured over them, they should be placed at the back of a greenhouse, or in any shed where they will be preserved from frost, and must have no water. *I. Amancaes* requires a much more sandy soil, and less moisture; if planted out of doors, a large potful of soil should be taken out of the border where it is set, and the hole filled with pure white sand, and, unless the summer is very wet, it will succeed well. If kept in the greenhouse, it should be potted in very sandy compost, and be watered sparingly; and should be left quite dry from the time the leaves decay till May. Peat and too much water have caused many cultivators to lose this plant, which is not difficult to preserve. Ismene is a classical name applied to this genus by Mr. HERBERT. ISMENE was a daughter of ŒDIPUS.

6. *Cypripedium spectabile*, Large White Lady's Slipper. Gynandria, Dianthia. Cypripediææ. A native of the low meadows and bogs in North America, particularly in the mountainous tracts from Canada to Carolina, flowering in May and June. This remarkable plant is the finest of the North American *Cypripediums*, and is not by any means uncommon in the gardens of this country, its roots being periodically imported. It has, however, resisted all attempts at propagating it, and seldom lives above a year or two after its arrival. Those who manage it the best treat it as a greenhouse plant, keeping it very near the light until its leaves have withered, when it is removed to a dry shelf, till its growing season returns. *Cypripedium*, from *Kypris*, Venus; and *podion*, slipper,—in allusion to the form of the flower.

7. *Catasetum luridum*, Lurid Catasetum. Gynandria, Monandria. Orchidææ. Syn. *Auguloea lurida*. This plant is a native of the woods, not only of

Bahia, but probably of the greater part of Brazil. Like all the species with similar habits, it grows freely in decayed vegetable matter, mixed with a little pure loam, among quantities of potsherds, and it probably will soon become common. Although it cannot be compared for beauty with *C. tridentatum*, it is nevertheless a very interesting species; the spots on the margin of the lip are of the deepest and richest ruddy brown; while the horus of the column may be compared to the fore legs of some spider, lurking in the bosom of the flower, to seize upon the victims that may enter it. *Catasetum* is a name the meaning of which is unexplained.

8. *Begonia heracleifolia*, Parsnip-leaved Begonia. Syn. *Begonia radiata*. Monœcia, Polyandria. Begoniaceæ. A native of Mexico, where it was met with by the German travellers, SCHIEDE and DEPPE, in several localities. It is a very free growing hothouse plant, producing its rosy flowers in every month of the year. All that it demands at the hand of the cultivator is heat, moisture, and a full exposure to the light. If kept too much in the shade, the flowers lose the bright rosy tint which is natural to them, and with it their beauty. *Begonia*, named in honour of MICHAEL BEGON, a French promoter of Botany.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s.; plain,
2s. 3d.

1. *Manettia glabra*, Smooth Manettia. Syn. *Manettia cordifolia*. Tetrandria, Monogynia. Rubiaceæ. This is an exceedingly elegant plant. Its delicate and graceful form, and its long scarlet blossoms, contrasted with its broad deep green foliage, render it one of the most beautiful objects that can well be conceived. The plant appears to thrive best in a mixture of sandy peat and loam, is of easy culture, and is readily increased by cuttings, planted in sand, and placed in artificial heat. Like most of the plants of the same country, it will doubtless succeed well in the open border during summer. The genus was named by LINNÆUS, at the request of his correspondent MUTIS, after XAVIER MANETTI, Professor of Botany at Florence.

2. *Artanena fimbriatum*, Fringed flowered. Didynamia, Angiospermia. Scrophularinæ. Syn. *Torrenia fimbriatum*, *Torrenia scabra*. A native of the banks of the River Brisbane, at Moreton Bay, New Holland; whence seeds were transmitted, by the late Mr. C. FRAZER, to the Edinburgh Botanic Garden, where the plant blossomed in 1831. Although usually treated as a greenhouse plant, it will be found to succeed very well in the open border during the summer months, producing its blossoms and ripening its seeds freely. Flowers: blue, with violet streaks, about an inch long, very showy and an interesting addition to our gardens. It should be planted in a mixture of peat and loam; is increased by seeds, or by cuttings.

3. *Linaria circinata*, Curved-leaved Toad-flax. Didynamia, Angiospermia. Scrophularinæ. This curious species was raised by Mr. ANDERSON, in the Chelsea Botanic Garden, from seeds received from Buenos Ayres; but it seems more probable that it is a native of Northern Africa, as most of the species of the section of the genus to which it clearly belongs, are natives of that country. The plant is apparently somewhat shrubby. Flowers: axillary, solitary, sulphur coloured, dotted with dark red, very pretty. The plant requires a light loamy soil, and may readily be increased by cuttings. It also requires to be protected during winter, in a pit. *Linaria*, from *linum*, flax,—having similar leaves.

4. *Lablavia vulgaris*, Egyptian Haricot. Diadelphica, Decandria. Leguminosæ. Syn. *Lablav vulgaris*, *Lablav niger*, *Dolichos Lablav*, *Phaseolus niger*, *Dolichos purpurea*, *D. Bengalensis*, *D. albus*, *D. Lablav*, *Lablav nan-kinicus*, *L. leucocarpus*. This plant is cultivated in India, China, Egypt, and many other countries of the East, and also in the West Indies, on account of its pods, which are prepared and eaten in the same manner as Kidney

Beans. It is an extremely showy plant, and is admirably suited for being trained to trellis-work, or over a verandah. Mr. LITTLE, nurseryman, King's Road, Chelsea, has cultivated it for some years as an ornamental plant; and he finds it quite as hardy, and to require the same treatment, as the Kidney Bean. Flowers, in long interrupted clusters, of a pale purple, varying often to dark purple, or white; blooms from July to October. The name Lablab means simply, in Arabic, a twining plant, and is applied indiscriminately to the *Convolvulus* and many others of similar habit.

The Botanic Garden. Edited by Mr. B. MAUND, F. L. S.

Coloured: 1s. 6d. large; 1s. small.

1. *Rosa indica*, Rose Clare. This Rose partakes of the habit and character of the China Rose, and there is little doubt but it has been raised from this species; where, or by whom, we cannot with confidence state. Report, however, states, that it originated with a gentleman of the name of CLARE; and that it was raised from seeds brought from Italy. It grows very freely wherever other Roses flourish, and produces an abundance of flowers, from the commencement of the season to the end of autumn. Flowers: fine deep rose, single, blooming in clusters; deserves general cultivation; grows to the height of ten feet. The Celtic word *rhos*, a Rose, from the word *rhodd* of the same language, signifying red, has, with a little variation, been transferred into numerous other languages, to convey a meaning similar to the original. *Indica* is applied as a specific name, to connect the plant with its native country.

2. *Coronilla Iberica*, Iberican Coronilla. Diadelphia, Decandria. Leguminosæ. It is a delightful plant for the foreground of the parterre. It spreads freely, completely covering the surface of the soil with its neat foliage; from amongst which, rise its brilliant little coronets of yellow blossoms. Luxuriant foliage and flowers will be yielded by a rich fresh loamy soil, which it requires. It should be planted in an open situation, uninfluenced by the shade of trees. *Coronilla*, from *corona*, a crown; *Iberica*, a district bordering on Mount Caucasus.

3. *Digitalis laciniata*, Cut-leaved Fox Glove. Didynamia, Angiospermia. Scrophularinæ. This plant is a native of Spain, and but little known to English botanists; and although it has borne the two or three last winters without injury, we do not anticipate that it will become a plant of so hardy a character as to stand unprotected, in severe seasons. Flowers: stalk rises eighteen inches high; blooms from July to September; colour, a rosy red and buff. In dry summers, seeds are produced abundantly. It may also be propagated by cuttings. Loamy soil should be preferred to that which is peaty, and a warm situation. *Digitalis*, from *digiale*, the finger of a glove.

4. *Verbena urticifolia*, Nettle-leaved. Didynamia, Angiospermia. Verbenacæ. It is an upright plant, of strong growth, rising three feet high; and although its flowers, taken separately, are small, they become showy on the aggregate. It blooms from July to October. A native of North America. Flowers: purple. Culture: increased freely by division of the plant. *Verbena*, a Roman name for herbs used in ancient sacrifices.

The Number for March (omitted in our last) contains—

1. *Hedysarum obscurum*, Creeping Hedysarum. Diadelphia, Decandria. Leguminosæ. A beautiful little plant for the borders, mounds, or artificial rockwork; but it should be so placed that its beauty may not be hidden by more diffuse subjects. Grows six inches high; flowers in July and August. It will grow in any common soil, particularly in a sandy one. *Hedysarum*, from the Greek *hedys*, sweet; and *aroma*, a perfume.

2. *Sanguisorba Canadensis*, Canadian Great Burnet. Tetrandria, Monogynia. Sanguisorbæ. A native of Canada, cultivated in 1633; a perennial, bearing spikes of white flowers; five feet high; it flowers in August and Sep-

tember. *Sanguisorbia*, from the Latin *sanguis*, blood; and *sorbes*, to absorb, —from the astringent qualities of the *Sanguisorba officinalis*.

3. *Jasione perennis*, Perennial, Sheep's Scabious. Pentandria, Monogynia. Campanulaceæ. A perennial, introduced from France in 1787. When grown to perfection, it is a neat and attractive flower, growing one foot high; flowers in June and July; colour, blue. In order to grow it to perfection, plants must be raised in autumn, and planted singly, or at least not too closely together. The most suitable soil will be peat, or peat and loam; the situation should be tolerably dry.

4. *Lilium pomponium*, Pomponé Lily. Hexandria, Monogynia. Tulipacæ. A native of Siberia, cultivated in 1629; a perennial; grows two feet high; flowers in May and June; colour, deep orange red, spotted with black towards the centre. According to Mr. LOUDON, the *Lilium pomponium* is cultivated in Kamtschatka as the potatoe is in Britain, and that its bulbs are in like manner laid up for winter store; they are called *savannas*, and when boiled, taste exactly like a waxy potato. Their roots demand no culture; their flowering stems grow up independently of the gardener's care; we need only observe, that the bulbs should not be moved when in an active state of growth. *Lilium*, from *li*, whiteness; some of the varieties being of a pure white colour.

On Promoting the Healthiness of Plants, and the Destruction of Insects on them.

Nothing contributes so much to the health of a garden as a number of Camomile plants dispersed through it. No greenhouse or hothouse should be without Camomile, in a green or in a dried state; either the stalks or flowers will answer. It is a singular fact, that if a plant is drooping, or apparently dying, in nine cases out of ten it will recover, if you place a plant of Camomile near it. The flowers should be gathered before they change their colour, and spread in a loft, or in a shady place, for four or five weeks, until they are quite dry. The plan I venture to recommend for general adoption is this,—to anticipate these troublesome visitors, by having trees, &c. syringed with a decoction of Camomile, prepared in the manner I shall describe below, in the months of January, February, and March. Diseased parts should be properly cleansed and washed with the decoction. It might be accomplished at a time when no other work could well be done; and the expense would be comparatively nothing.

Supposing the above precaution was neglected, and the insects really appear on your trees, fumigation with Camomile, and washing with the decoction, will be found to answer as effectually as tobacco. For the purpose of fumigating, the dried stalks of the plant may be used; but if you have not the stalks, you may burn the flowers.

The decoction is prepared in the following manner:—Boil a gallon of clear rain-water, and pour it into an earthen or wooden vessel, upon a pound weight of Camomile stalks or flowers; cover the vessel down, but not *too close*; stir it occasionally, and when cold pour off the water, and put another gallon of boiling water, as above, on the same flowers; to these two gallons of extract, when mixed, add six gallons of clear unboiled rain-water. For some purposes this mixture might be too strong, and for others not strong enough; but the gardener must make use of his own understanding, and act with due caution, or as circumstances may point out.—*Irish Farmer's and Gardener's Magazine*.

PILLARS OF ROSES.—One of the prettiest floral fancies of the present day is that of forming pillars of Roses. These pillars consist of Roses trained on iron stakes, from 12 feet to 15 feet high, well painted; and they form the most durable, as well as the most picturesque, objects in garden scenery. During the ensuing summer, I intend to make an accurate list of all the Noisette Roses that are suitable for training in this mode. These, with some

of the Ile de Bourbon varieties, added to the already numerous and decided Climbing Roses, will make a magnificent display. Merely to show how a heap of clay may become a mount of beauty, I last spring levelled and made circular a large quantity of white and blue clay, dug from a pit to contain water: on this, with a small portion of dung and pit-sand to each plant, I planted some of all the hardy Climbing Roses. The effect is now beautiful; and another summer it will be a mount of Rose pillars, each from eight to ten feet high.—T. RIVERS, JUN.—*Gardener's Magazine*.

THE CELEBRATED COLLECTION OF ORCHIDÆ, which belonged to the late MRS. ARNOLD HARRISON, of Liverpool, was purchased by Mr. KNIGHT, Exotic Nursery, in the beginning of February last.—*Ibid*.

TULIPS.—A correspondent in the *Field Naturalist* for March, observes,—“Last year I had a bed of Tulips of the rare and beautiful sorts, which I thought I would protect from chance of frost, by covering them with *tan*. They all flowered perfectly black.”

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON THE CHINESE PRIMROSE.—Will any of your correspondents have the kindness to inform me of the best method of cultivating and propagating the Chinese Primrose? Should they be always kept in pots, or occasionally turned into the open ground?

GULIELMUS.

ON THE FLOWERING OF CHRYSANTHEMUMS IN SUMMER.—I observe one great horticulturist, MILLER, and other writers, speak of these beautiful plants flowering in summer. He says,—“Cuttings taken from the plants the beginning of September, and planted in pots, will readily take root; and if they are placed under a hotbed frame, to screen them from the frost in winter, letting them have free air in dry weather, they will live through the winter; and in the spring these plants may be transplanted into the borders of the flower-garden, where they will flower in June, and continue in succession till the frost puts a stop to them.”—I have practised this method, but have been disappointed; for none of my plants bloomed until the usual time in November. Can you, or any of your intelligent correspondents, furnish me with any information on this subject?

London, Feb. 25th, 1834.

GULIELMUS.

ON THE BIGNONIA.—I should feel greatly obliged to “An Ardent Amateur,” if he would answer the following questions:—1st. What is the proper time to put in cuttings? 2nd. What is the proper soil? 3rd. What is the proper aspect? 4th. Whether they require mats in winter, and whether they are semi-hardy, or perfectly so?

A LOVER OF FLOWERS.

ON THE AURICULA.—“A Lover of Flowers” would esteem it a particular favour, if the Conductor of the much-admired and useful little work, the *Floricultural Cabinet*, would inform her of the properties of a choice Auricula.* A sketch of one would be a great acquisition; but the latter is only a hint from a sincere admirer and well-wisher to the *Floricultural Cabinet*.

ON THE DAHLIA.—Will any of the readers of the *Floricultural Cabinet* be kind enough to inform me what is the best soil to grow Dahlias in, and whether they require much water?—what are the properties of a choice flower?—and likewise how old seedling plants are before they blow?

A LOVER OF FLOWERS.

* See page 118 of the present Number.—CON'D.

ON POTSDHERDS.—Having frequently observed it recommended in the *Floricultural Cabinet*, to place potsherd at the bottoms of pots, I should consider it a favour if the Conductor would inform me what is meant by potsherd.

A LOVER OF FLOWERS.

[Small pieces of broken garden pot.—COND.]

ON THE WHITE WATER LILY.—In *Loudon's Encyclopædia of Plants*, it is stated that the *Nymphæa alba* (White Water Lily) will grow well in large pots of water, with a few inches of rich soil at the bottom. Can you, or any of your correspondents, inform me what sized pots would be required?—when the roots should be planted?—and what soil would suit them best? An early answer would particularly oblige

F. W. G.

Sudbury, Suffolk, March 16th, 1834.

ON FLORIST'S FLOWERS.—You will pardon me for intruding myself on your attention; but having a great desire for knowledge on cultivating what are termed florist's flowers, I now presume to address you as follows:—

Imprimis.—I wish to know whether the compost for Carnation, Tulip, Hyacinth, Ranunculus, Anemone, and Pink beds, requires to be removed every year,—to speak in plain language, I mean whether the old, or last year's compost, is to be all dug out of the excavations, and entirely new compost to be substituted; or whether it only requires to be renewed with an addition of the same materials as those of which the beds are made.

I should also like to have a little information respecting the raising of the Carnation, Pink, Auricula, and Tulip, from seed,—whether the three first are best raised in heat, or not,—the soil,—and best time for sowing the seed. I wish to know how long Tulips raised from seed are before they flower, and whether it would injure good Tulips materially to allow them to ripen seed. Could you also let me know what constitutes a perfect flower in the Auricula and Polyanthus?

S. PINNOCK.

April 3rd, 1834.

P.S. I am happy to see your Magazine succeed so well, and heartily wish it a future continuance of support. I should like to see it published of-
tener.

ON GIVING THE ENGLISH NAMES TO PLANTS, &c.—I have derived much information from your little periodical, entitled the *Floricultural Cabinet*; but not so much as I might do, were you to give the common English names of the flowers after their scientific appellations. In the descriptions of the plates, I observe the English names are given, and I hope you may be induced to do the same in the directions for the cultivation of particular flowers, &c., as I dare say many of your readers are of the same class as myself, and not more acquainted with the botanical names than I am.

In the Number of the *Floricultural Cabinet* for March, 1833, you say that the last year's layers of Carnations should be planted off into large pots, three in each pot. Why may they not be planted singly in smaller pots?—and if they may, I would thank you, or some of your correspondents, to inform me of what size the pots should be in diameter at the top and bottom, and of what depth; as I do not understand what is meant by 48's, 60's, &c. in reference to pots.—[See page 44 of the present Volume.—COND.]

Rowner, March 18th, 1834.

A LADY N.

ON BULBOUS ROOTS, &c.—In looking over my Volume of the *Floricultural Cabinet*, at page 97 I observe an Article by "Snowdrop," on the culture of Hyacinths, which remarks, I should suppose, will apply equally, and with as much propriety, to all bulbous roots as to Hyacinths. I refer to that part of his excellent Article, where he states, "the bulbs ought not to be removed oftener than once in four years." I, therefore, imagine that he has allowed his bulbs to remain in the earth all this winter. If so, I should wish him to inform me, when the season is over, whether they have bloomed to his satisfaction, or that his stock is very much deficient. I fear the latter will be the case. Perhaps he may say the last autumn has been a very uncommon one, and that so much rain has not fallen before for a very considerable time. Still I think some plan ought to be devised to prevent the recurrence of such a

loss, (for it will be a very serious loss to persons who have a large collection of bulbs); and this can only be done by a continuation of the old method of taking them out of the earth every season, after they have finished their reign of beauty.

I would here also bear testimony to the many excellent Articles that have appeared in the *Floricultural Cabinet*, and which have been the means of imparting much valuable information to amateur gardeners, who, like myself, are attached to the culture of nature's most beautiful productions; and, if I am not already trespassing too much upon your attention, I would suggest the propriety of advancing the price of your Floral Numbers from 6d. each to 1s., whereby you would be enabled to give us the plate much better coloured, with more information; and surely no one would object to give a shilling each month for the valuable contents of one of your Numbers, and especially at this time, when the love of flowers is becoming more general every year, which is fully proved by our having been able, even in this desert and mountainous part of the country, to form a Floral Society, which has only been in existence two years, yet at the last meeting there were flowers and fruit shown which would not have disgraced a much older Society.

You must excuse my occupying so much of your notice, but perhaps I shall not trespass again.

CHAS. K.

Saddleworth, Feb. 8th, 1834.

[We shall be glad to hear from our correspondent.—COND.]

ON FLOWERING MESEMBRYANTHEMUMS, &c.—I shall be obliged if you, or any of your correspondents, would inform me, through the pages of the *Floricultural Cabinet*, (to which I have been a regular subscriber,) the best method of cultivating the various kinds of Mesembryanthemums, so as to ensure their blossoming. I have had my plants two or three years, and they look very healthy, but have hitherto failed in producing flowers. I have not any means of applying artificial heat, but by hotbeds.

I should also be glad to know the most certain method of blooming the *Cactus speciosa* with the above means.

EMILY.

March 4th, 1834.

ON A SELECTION OF PLANTS.—I have been a subscriber to your Magazine from its commencement, and I believe I may say you are indebted to me for a very wide circulation of it in this country. Go on, Sir, as you have begun, and you will deserve a still greater patronage than you have yet received. The duties of a parish prevent me from giving that attention to my garden that I could wish, and the *res angusta domi* prevent the erection of a greenhouse; but as I have a lawn, with beds at intervals on it, to be filled in summer, and a kind friend's sheltering greenhouse for my Geraniums in winter, I am anxious to improve my stock of plants, both annuals and perennials, so as to rival my neighbours in beauty, if I can. Would you, or any of your numerous correspondents, take pity on a parish priest, and tell him what of each sort (annual or perennial) would be best to fill two beds now empty—say of 50 feet by 4. The soil is loamy, and half of the beds in shade. Peat and sand are so difficult to procure in our neighbourhood, that I am obliged to forego the claims of their flowers. And if the price of each shrub, and the probable difficulty of procuring the mentioned seeds, were named, the favour would be greater; also, the colour and height of each specified flower. It has long been my wish to make this request, but I have been deterred from the fear, that however interesting such information might be to me, it would be little to your readers; but as, since the desire was first formed, many have applied to me for the request I now make, in assiting me you would be also assisting many of your other subscribers.

VIOLET.

Vicarage, Wilts, March 3rd, 1834.

ANSWERS.

ON DESTROYING THE WIRE-WORM.—Not seeing any reply to "E. R. W.'s" inquiry about the Wire-worm, perhaps, if you have no better, you may think the following worth your insertion:—Finding the Wire-worm in my Ranun-

culus bed (a very small one), I cut a large potatoe into thick pieces, and running a small stick through each, buried them between the rows, about the same depth as the roots, leaving the sticks above ground. After two days, on lifting up the sticks very gently, I found the potatoes covered with worms, which I destroyed, and replanted the potatoes. If I looked two days together, I seldom found above one or two; it is better to leave them two or three days betwixt each examination. If the potatoes get dry, fresh pieces should be put; but one was quite sufficient for my purpose. In a fortnight, I destroyed some hundreds. Not a single *Ranunculus* was injured, and the bed is now perfectly clear of them. If it be too much trouble to examine the traps, it is worth while to put them in, as the Wire-worm will choose them in preference to the fresh hard roots. Slugs are also caught at the same time.

March 12th, 1834.

S. H.

ON THE CULTURE OF THE GENUS *SEDUM* IN POTS.—A correspondent, "Snowdrop," wishes to know the most successful method of blooming the genus *Sedum* in pots. I beg to state, that I have had under my care a number of *Sedums* in pots, which flowered in very great perfection. The soil I used was turf that had lain for the coping of a wall for two or three years, and had been fully exposed to the action of the weather. This I chopped very small, and added to it a quantity of lime rubbish, mixing about half the quantity of lime rubbish to the soil. With this mixture I filled the pots, taking care to drain them well from any stagnant water; and my *Sedums* grow and bloomed profusely.

J. J.

March 24th, 1834.

ON HUMAN URINE AS A MANURE.—At page 46, Vol. I. of the *Cabinet*, "Snowdrop" asks, "Is human urine a beneficial manure?" VAN OSTEN, in his *Dutch Gardener*, (published in 1703,) at page 123, treating on the Hepatica, has the following passage:—"Plant them in sandy ground, mixed with dung that is hard and tough; it is also good to water them sometimes with human urine, but not when they are in flower; if you observe this, they will so increase that you may fill your garden with them in a short time."—I do not grow the Hepatica, and therefore have never tried the Dutchman's recipe.

J. BANTON.

REMARKS.

ON THE PROPERTIES OF A PERFECT AURICULA.—*The Plant*.—1. The stem should be strong, stiff, and erect, about six inches high.—2. The footstalks of the pips should be strong and stiff, and of a proportionate length to the size and quantity of the pips, so as to form a close and compact truss, without lapping over each other, and not less than seven in number, which should be all alike in colour and property.—3. The foliage should be healthy, and almost cover the pot.

The Pip.—1. Should be round, large, lay perfectly flat, and quite smooth at the edges, without notch or fringe.—2. Its centre, or tube, should be perfectly round, of a fine yellow or lemon-colour, well filled with the anthers, and should not exceed one-fourth of the diameter of the pip.—3. The eye should be perfectly round, of a pure white, smooth, without crack or blemish, and form a circle, not less than half the width of the tube, all round it.—4. The ground colour should be dense, whole, and form a perfect circle next the eye, and on the outer part be finely broken into a feathery edge. It should be equal on every side of the eye. The brighter, darker, and richer the colour, the better the flower; but if it be paler at the edges of the petals, or have two colours or shades, it is a fatal defect.—6. The margin or outer edge should be a fine unchangeable green or grey, and be about the same width as the ground colour, which must in no part go through the eye. From the edge of the eye to the outer edge of the flower, should be as wide as from the centre point of the tube to the outer edge of the eye.

ON THE PROPERTIES OF A PERFECT POLYANTHUS.—*The Plant*.—1. The stem should be strong, upright, and elastic, from four to seven inches high.—2. The footstalks of the pips should be stiff, and so proportioned as to length;

that all the pips may have room to show themselves, without lapping over each other, and form a close compact truss, of not less than seven in number, and all alike as to colour and property; the calyx should not be so long as to show itself at a front view of the pip.—3. The foliage should be healthy, and almost cover the pot.

The Pip.—1. Should be large, quite round, and perfectly smooth at the edges, without notch or serrature, and lay perfectly flat.—2. The tube should not exceed one-third the diameter of the pip; it should be of a fine yellow, perfectly round, and well filled with the anthers.—3. The eye should be perfectly round, of a bright, clear, rich yellow, forming a complete circle, and not less than twice the width of the tube all round it; the petals should not cut into the eye.—4. The ground colour should be whole, of a bright, rich, dark crimson, and not paler at the edges of the petals; the ground colour should not be more than the width of the eye all round the tube, and regular on every side of the eye.—5. The edging should be a fine lemon-yellow, not more than one-third the width of the tube, and regular on every side of the ground colour, and go through the division of each limb down to the eye.

ON THE SIZE OF PINK AND CARNATION FLOWERS.—As so much has been said in your late numbers of the *Floricultural Cabinet*, respecting the dimensions of Pinks and Carnations, allow me to say, in support of "Innovator's" statement, that last season I flowered the Duchess of York Pink four inches, and Hogg's Penelope Purple Picotee five inches, in diameter. I trust that, after these repeated assurances, "B. M.'s" doubts will be removed, as I have no hesitation in attributing his failure of flowering them to a large size, to the imperfection of soil.

WILLIAM YOELL, Nurseryman and Florist.

Great Yarmouth, March 4th, 1834.

ON FERNS.—I have perused with great pleasure the excellent remarks on British Ferns, made by "M." in her three papers on the subject. On carefully investigating No. III., at page 83, Vol. II., I perceive that she says that the *Blechnum boreale* is found about moist shady hedge-bottoms in Nottinghamshire and Derbyshire. So, far, I have no doubt, may be correct; but I can unhesitatingly assert—and confidently assure your correspondent "M." and your numerous readers—that I have found it in great plenty in both Staffordshire and Cheshire, and on barren rocks, with but little soil to grow in, particularly on a celebrated mountain called Moule Cope, but by the surrounding inhabitants Mow and Mow Cop. I shall make a few observations on the classification of Ferns in a future Number.

F. F. ASHFORD.

REFERENCE TO PLATE.

1. *Salpiglossis linearis*, Linear-leaved Salpiglossis. Synonym, *Nierembergia intermedia*. Class, *Didynamia*; order, *Angiospermia*. Natural order, *Solanaceæ*. Seeds of this plant, which is exceedingly pretty, and well deserving of cultivation, were received by Mr. NEILL, from Mr. TWEEDIE, at Buenos Ayres, in 1832; and the first specimen brought into flower in the stove at Canonmills, in the end of September. It will continue in bloom from April to November. It strikes very readily by cuttings, and will probably thrive well in a dry, light greenhouse. The habit of this plant is wholly that of *Nierembergia*; the flower, in shape and structure, precisely that of *Salpiglossis integrifolia* of HOOKER, *Nierembergia phœnicea* of DON.

2. *Spiræa grandiflora*. *Icosandria*, *Pentagynia*. *Roseaceæ*. This most beautiful hardy shrub is a native of Kamtschatka. It was raised by Messrs. LODDIGES's, from seeds sent by Mr. BUSCH, in 1826. It bears a resemblance to *Spiræa salicifolia*, but is a much finer plant, and the flowers are more than double the size, and of a fine rose-colour. It is a valuable acquisition to the shrubbery. It flourishes in the open ground, in light loamy soil, and flowers in July and August. May be increased by layers or cuttings.

3. *Ipomœa rubro-cœrulea*, Reddish-blue *Ipomœa*. *Pentandria*, *Monogynia*. *Convolvulacœæ*. Seeds of this splendid plant were collected by Mr. SAMUEL

RICHARDSON, (an officer in the Anglo-Mexican Mining Association,) in the province of Guanajuato, in Mexico, and were by him presented to J. D. **POWLES**, Esq., of Stamford Hill, who liberally distributed them. It is a twining smooth plant; the corolla in bud, white, with the limb of a rich lake red; and when fully expanded, becomes of a fine purplish blue. It has flowered in the stoves of **JOHN ALLCARD**, Esq., of Stratford Green, Essex; and of Miss **LOXLEY**, near the same place. Culture: increased by cuttings, and requires a rich loamy soil.

FLORICULTURAL CALENDAR FOR MAY.

PLANT STOVE.—Very little fire-heat will now be required, only applying it in cold weather. The plants will progressively require an increase of air and water. If any want an increase of pot-room, it should be attended to as early as possible; otherwise, if not watered frequently, the foliage or flowers will be liable to suffer, turn brown, or fall off the plant. Keep the plants free from decayed leaves, moss, &c. Frequently stir the surface of the soil. When any casual irregularities in form occur, prune or tie the shoots as required. It is a good time for propagating by cuttings, suckers, seeds, &c. placing them in moist heat.

TENDER OR STOVE ANNUALS.—When it is desired to have some plants to bloom late in autumn, as Balsams, Cockscombs, Broccolias, &c., seeds should now be sown, and the plants be potted off into small sized pots, as soon as they are large enough, using a rich soil.

GREENHOUSE.—During the early part of May, a few frosty nights generally occur; in consequence of which, it is advisable not to take out the general stock of plants before the middle of the month, or even in cold situations, before the 25th. Whilst the plants, however, remain in the greenhouse, let them have all the air that can be given, during the day, and at nights if no appearance of frost. Particular attention will now be required to afford an ample supply of water to free-growing kinds of plants. Frequently syringe them over the tops at evening, just before sun set. If any of the plants be attacked with green fly, or any other similar insects, apply a sprinkling of tobacco water, diluted with water, by adding to one quart of the liquid five of water; in applying which to the plants, syringe them at the under as well as upper surface of the leaves: a repetition will rarely be required. This mode of destroying the insects is far preferable to fumigation, no injury being sustained by it, even if applied in a pure state. The liquid can be obtained of tobaccoists at 10d. or 1s. per gallon. Inarching Orange or Lemon trees may still be performed. It is a good time for increasing plants by cuttings, striking in moist heat. Greenhouse annuals—as *Salpiglossises*, *Globe Amaranthuses*, Balsams, &c.—should be encouraged by a little warmth, and shifted into larger pots, early in the month; so that the plants may make a show, to succeed the removal of the general collection of greenhouse plants. Cuttings or suckers of *Chrysanthemums* should now be taken off, if not done before.—See Vol. I., pages 73 and 121; and Vol. II., page 83.

FLOWER GARDEN.—Continue to protect beds of *Hyacinths*, *Tulips*, &c. Carnations in pots should be encouraged by manure-water, &c., in order to grow them vigorously: care in striking them will be required. By the middle of the month, half-hardy annuals—as *China Asters*, *Marigolds*, &c.—may be planted out in the open borders. Some of the best kinds may be potted, as done to the more tender sorts. Many kinds of greenhouse plants—as *Petunia*, *Salpiglossises*, *Salvias*, *Fuchsias*, *Heliotropes*, &c.—should now be planted out in the open border. *Dahlias*, that have been forwarded in pots, frames, &c., may be planted out towards the end of the month. Seedlings may be pricked out, in a warm situation, having a deep, fresh, rich soil. When Stocks, *Mignonette*, *China Asters*, &c. are wished to bloom late in the year, seeds may now be sown, either under a frame or on a warm border. Slips of *Double Wallflowers* should now be put in, under a hand-glass. Seeds of biennials—as *Sweet Williams*, *Scabios*, *Campions*, &c.—should now be sown. *Tuberose*s, for late flowering, should now be planted, either in pots or warm borders.

N.B. See Vol. I., May Number.

F. F. A.



Manettia Glabra



Salvia angustifolia



Portulaca Gilliesii



Tropaeolum tricolorum

J & J Parkin Sc.

THE
FLORICULTURAL CABINET,

JUNE 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*An Essay on Flowers.* Communicated
by GULIELMUS.

Having derived both amusement and instruction from the perusal of your useful and interesting publication, the *Floricultural Cabinet*, to which I have subscribed from its commencement, I feel desirous of promoting its object by sending you the following elegant Essay on Flowers, which I have transcribed from the "*New Monthly Magazine*," 1828; and wish it may prove the means of stimulating others to support your undertaking, and cause them more particularly to attend to the delightful and healthful pleasures of the flower-garden, as it has been to

GULIELMUS.

London, 25th February, 1834.

When summer's delightful season arrives, rarely in this country too warm to be enjoyed throughout the day in the open air, there is nothing more grateful than a profusion of choice flowers around and within our dwellings. The humblest apartments, ornamented with these beautiful productions of nature, have, in my view, a more delightful effect than the proudest saloons with gilded ceilings and hangings of Genoa velvet. The richness of the latter, indeed, would be heightened, and their elegance increased, by the judicious introduction of flowers and foliage with them. The odour of

VOL. II.

R

flowers, the cool appearance of the dark green leaves of some species, and the beautiful tints and varied forms of others, are singularly grateful to the sight, and refreshing at the same time. Vases of Etruscan mould, containing plants of the commonest kind, offer those lines of beauty which the eye delights in following; and variform leaves hanging festooned over them, and shading them if they be of a light colour, with a soft grateful hue, add much to their pleasing effect. These decorations are simple and cheap.

Lord BACON, whose magnificence of mind exempts him from every objection as a model for the rest of mankind, (in all but the unfortunate error to which, perhaps, his sordid pursuit in life led him, to the degradation of his nobler intellect,) was enthusiastically attached to flowers, and kept a succession of them about him in his study and at his table. Now the union of books and flowers is more particularly agreeable. Nothing, in my view, is half so delightful as a library set off with these beautiful productions of the earth during summer, or, indeed, any season of the year. A library or study, opening on green turf, and having the view of a distant rugged country, with a peep at the ocean between hills, a small fertile space forming the nearest ground, and an easy chair and books, is just as much of local enjoyment as a thinking man can desire. I reckon not if under a thatched or slated roof, to me it is the same thing. A favourite author on my table, in the midst of my bouquets, and I speedily forget how the rest of the world wags. I fancy I am enjoying nature and art together, a consummation of luxury that never palls upon the appetite—a desert of uncloying sweets.

There is something delightful in the use which the Eastern Poets, particularly the Persian, make of flowers in their poetry. Their allusions are not casual, and in the way of metaphor and simile only; they seem really to hold them in high admiration. I am not aware that the flowers of Persia, except the rose, are more beautiful or more various than those of other countries. Perhaps England, including her gardens, green-houses, and fields, having introduced a vast variety from every climate, may exhibit a list unrivalled, as a whole, in odour and beauty. Yet flowers are not with us held in such high estimation as among the Orientals, if we are to judge from their poets.

Bowers of roses and flowers are perpetually alluded to in the

writings of Eastern Poets. The Turks, and indeed the Orientals in general, have few images of voluptuousness without the richest flowers contributing towards them. The noblest palaces, where gilding, damask, and fine carpeting abound, would be essentially wanting in luxury without flowers. It cannot be from their odour alone that they are thus identified with pleasure ; it is from their union of exquisite hues, fragrance, and beautiful forms, that they raise a sentiment of voluptuousness, in the mind ; for whatever unites these qualities can scarcely do otherwise.

Whoever virtuously despises the opinion that simple and cheap pleasures, not only good, but in the very best taste, are of no value because they want a meretricious rarity, will fill their apartments with a succession of our better garden flowers. It has been said that flowers placed in bed-rooms are not wholesome. Plucked and put into water, they quickly decay, and, doubtless, give out a putrescent air ; when alive and growing, there need not be any danger apprehended from them, provided fresh air is frequently introduced. For spacious rooms, the better kinds, during warm weather, are those which have a large leaf and bossy flower. Large leaves have a very agreeable effect on the senses ; their rich green is grateful to the sight ; of this kind, the *Hydrangea* is remarkably well adapted for apartments, but it requires plenty of water. Those who have a green-house connected with their dwellings, have the conveniences, by management, of changing their plants as the flowers decay ; those who have not, and yet have space to afford them light and occasionally air, may rear most of those kinds under their own roof, which may be applied for ornament in summer. Vases of plaster, modelled from the antique, may be stained any colour most agreeable to the fancy, and fitted with tin cases to contain the earthen pots of flowers, to prevent the damp from acting on them, will look exceedingly well.

The infinite variety of *Roses*, including the *Guelder Rose* ; the *Rhododendron*, and other plants of similar growth, are fitted for the saloon, but they please best in the library. They should be intermingled with the book-cases, and stands filled with them should be placed wherever practicable. They are a wonderful relief to the student. There is always about them a something that infuses a sensation of placid joy, cheering and refreshing. Perhaps they were first introduced at festivals, in consequence of

their possessing this quality. A flower-garden is the scene of pleasurable feelings of innocence and elegance. The introduction of flowers into our rooms infuses the same sensations, but intermingles them more with our domestic comforts ; so that we feel, as it were, in closer contact with them. The succession might be kept up for the greater part of the year ; and even in winter, evergreens will supply their places, and, in some respects, contrast well with the season. Many fail in preserving the beauty of plants in their apartments, because they do not give them sufficient light. Some species do well with much less light than others. Light is as necessary to them as air. They should not be too often shifted from one place to another. Those who will take the trouble, may quicken the growth of some plants, so as to have spring flowers in winter. Thus autumn and spring might be connected ; and flowers blooming in the winter of our gloomy climate possess double attractions.

For my own part, I manage very well without the advantage of a green-house. The evergreens serve me in winter. Then the Lilacs come in, followed by the Guelder Rose and Woodbine, the latter trained in a pot upon circular trellis-work. After this, there can be no difficulty in choosing, as the open air offers every variety. I arrange all my library and parlour-plants in a room in my dwelling-house, facing the south, having a full portion of light, and a fire-place. I promote the growth of my flowers for the early part of the year by steam-warmth, and having large tubs and boxes of earth, I am at no loss, in my humble conservatory, for flowers of many kinds when our climate offers none. The trouble attending them is all my own, and is one of those employments which never appear laborious. Those who have better conveniences may proceed on a large scale ; but I contrive to keep up a due succession, which to a floral epicure is every thing. To be a day in the year without seeing a flower is a novelty to me ; and I am persuaded much more might be done with my humble means than I have effected, had I sufficient leisure to attend to the retarding or forcing them. I cover every space in my sitting-room with the beautiful fairy things of creation, and take so much delight in the sight of them, that I cannot help recommending those of limited incomes, like myself, to follow my example and be their own nurserymen. The rich might easily obtain them without ;

but what they procure by gold, the individual of small means must obtain by industry. I know there are persons to whom the flowers of Paradise would be objects of indifference ; but who can imitate, or envy such ? They are grovellers, whose coarseness of taste is only fitted for the grossest food of life. The pleasures '*des Fleurs et des Livres*' are, as Henry IV. observed of his child, 'the property of all the world.'

ARTICLE II.—*On the Making and Formation of Gravel Walks.* By Mr. ROBERT MARNOCK, Curator to the Sheffield Botanic Garden.

The introduction of Gravel Walks in Pleasure-Grounds, being avowed objects of utility, may be said to be beautiful only in proportion to their fitness for the purposes for which they are intended. In the formation of a walk, the first consideration, after having determined on the line in which it is to be made, ought to be the most effectual means of rendering it at all times as dry as possible. When the subsoil is a retentive clay, a drain of bricks or stones, according to the inclination of the ground, or the distance the water may require to be conveyed before it is allowed to escape, is indispensable. When a walk is to be made in a situation of the latter kind, I have found the form of which the figure is a section, to answer very well.

Fig. 1.

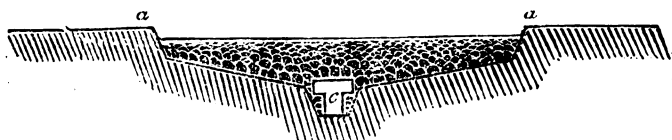


Fig. 2.



The verges or edgings being accurately laid at the height they are intended to remain, and well consolidated by binding or beating, to prevent future settling, are next to be cut in a sloping direction inwards. The verges ought never to be laid with turf,

and the adjoining ground sown with seeds of a different kind of grass; when turf is not plentiful, it is always better to sow the whole with seeds, and in that case the verges should be made up with soil free from stones, occasionally using a little water, so that the whole may tread firm and hard. When raised to the proper level, and cut as directed above, a drill made parallel with the walk on the extreme edge of the verge is filled with seeds, and neatly covered with soil. The rest of the ground is then sown rather thickly, and raked in in the usual way; and by attention to rolling and mowing, a good turf may be obtained in a few months. From the level of the verges (*a a*) to the bottom, is from six to seven inches, with an inclination to the drain (*c*) of one inch in a foot. The excavation completed, and the two sides of the bottom made firm and smooth, and the drains set with stones, or bricks, broken to the size generally used upon roads, laying a few larger pieces on each side of the drain, where the depth will permit. It is of importance that the stones or other material of which the substratum is composed, be perfectly free from earthy matter of every description. I have, therefore, always found it necessary to prepare these materials in a heap by themselves, and in removing them to use a strong narrow-pronged fork. This operation finished, and the surface made quite level and rolled three or four times over, it is then covered about an inch thick with binding gravel. To prevent as much as possible the gravel running down and mixing with the substratum, the first barrow-load being spread, the second is put down on the top of the first, the third on the top of the second, and so on till the whole is finished. In spreading the gravel, it is carefully pushed forward, in a considerable body, with the head of a wooden rake—teeth turned upwards. The gravel being all on, and neatly levelled and raked with a short-toothed wooden rake, to bring the pebbles to the top, the latter ought to be equally distributed over every part of the walk. Two or three boys, when they are well looked after, will do a good deal of this kind of work in a day, and when neatly performed, adds greatly to the beauty and firmness of the work, at very little additional expence. Nothing now remains but to give the whole a good rolling, which ought to be done when the gravel is between wet and dry, and the edges of the walk will be about half an inch deep.

With regard to the thickness which gravel ought to be applied, Miller has recommended from ten to twelve inches. Some subsequent authors say from ten to fourteen, and others again from five to six inches thick. The numerous gravel beds which are dispersed over the country, though consisting of substances very similar in their nature, are exceedingly various in their relative proportions to each other. In one bed we may perhaps find sand and small pebbles to prevail, in another pebbles and clay predominates, with very little sand; while in a third, we may probably find both sand, pebbles, and clay, all blended together in pretty equal proportions. As the kind of gravel to be used can, therefore, seldom be a matter of choice, it needs but little argument to prove the impropriety of always applying it the same thickness, without regard to the quality. In confirmation of this statement, I may mention as an instance, that the gravel found in this neighbourhood, though somewhat defective in colour, is in other respects equal to Kensington gravel, which has been said to be the best in the world; yet, if the gravel there be applied twelve or even six inches thick, it becomes as impervious to wet as if puddled on purpose to retain the water on the surface: and this must necessarily be the case with all gravels of a binding nature, when used in too great a quantity. If the thickness be properly adjusted to the nature of the gravel, a heavy shower will pass readily through to the substratum below, without appearing to accumulate on the surface of the walk; and if walked upon immediately after the shower, the gravel ought not to stick to the shoes, nor the least impression of the feet be left in the walk behind. Gravel that contains much clay will require to be used thin, and such as contains but little clay in proportion to the sand and pebbles, will of course require to be thicker, in order that it may set and become hard. When binding gravel cannot be obtained, river sand and pebbles mixed with clay previously dried and pounded, to cause it to blend with the other materials, will form a tolerably good substitute.

When walks are steep, and liable to be washed by heavy rains, I have found a kind of wooden spout or trough (Fig. 2), when placed across the walk and sunk level with the gravel, to be a very excellent preventive. The two sides (*e e*) are formed of strong oak boards seven or eight inches deep, half an inch apart at the

top, secured at that width by iron brackets eighteen inches from each other. The bottom is six inches wide, and so constructed that the water escapes into the drain under the centre of the walk, or is allowed to pass off at one end. The distance at which the spouts ought to be placed from each other, will depend on the inclination of the walk.

If walks are composed of sand or any other loose material, hoeing and raking will always be found the most economical mode of keeping; but when covered with binding gravel, weeding and sweeping will seldom cost one half the expense of hoeing and raking, to say nothing of the horror which a walk newly hoed and raked, and covered with loose pebbles, naturally raises in the minds of those who happen to have such things as corns on their feet. At the season when the seeds of weeds are most profusely scattered about by the wind, the surface of walks, if weeded, are smooth and hard, and by occasional sweeping, the seeds are removed before they have time to strike root; but when hoed, the surface is generally in a loose uneven state, and any seeds that are deposited upon them, must remain there till they have become perfect plants before they can be destroyed. Hoeing and raking, though it generally destroys one crop of weeds, is certainly the most effectual means that could be adopted to secure another.

Were gardeners, instead of having one, two, three, or more labourers, without the power of increasing them when required, allowed a certain number, with a discretionary power to expend a given sum, to be called in at particular seasons when most wanted,—they would then, by a concentrated force of labour, often be enabled to accomplish at the proper time that which, if delayed, must frequently be done to disadvantage, and sometimes at double the expense. Were this arrangement more generally acted upon, the walks could be let to women and children to be kept clear of weeds at so much for the season, and swept a certain number of times, either twice a week, once a week, or once a month, according to circumstances. The mowing of low grass could also be let at so much for each time going over, including all the details of clipping, sweeping, &c.; for such is the toilsome nature of this operation, that a man will be better able to give double the quantity of labour per day, if exempt from mowing, than if he is subjected to it for two or three hours every morning. I speak from

pretty ample experience as to the nature of the labour, and also the advantages to be derived both to the employer and the employed, that in letting all kinds of work that possibly could be let, I have invariably found it to be attended with very considerable advantages to both parties. Men are always willing to give a greater quantity of labour for the same money, if, by additional exertion on their own part, they are enabled to earn a little more per day.

ROBT. MARNOCK.

ARTICLE III.—*On the Culture of Geraniums (Pelargoniums), so as to cause them to bloom throughout Winter.* By Mr. WILLIAM DENYER, Gardener to Lady WEBSTER, Battle Abbey, Sussex.

Observing, in page 69, Vol. II. of the *Floricultural Cabinet*, that a Querist, "J. T.," requests information on the treatment of Geraniums (Pelargoniums), so as to have them to flower throughout the winter season, I am induced to forward the following detail of culture, which, if practised by "J. T.," will, I am confident, fully answer every expectation.

The first week in May put in cuttings to strike, placing them in moist heat. As soon as they are rooted, pot them into sixty-sized pots, and replace them in the frame for a week, to assist them in striking root afresh. At the end of that time, remove them to a cool frame, or a sheltered place, where they can have plenty of air, without being exposed to strong winds. By this means the plants will get stout and bushy. The pots should be placed upon coal-ashes, an inch or two deep, in order to prevent worms getting into the pots. The second week in August, repot the plants into forty-eights. If any flower-buds appear during this month, cut or pinch them off, but do not shorten the points of the shoots; for if this be done at any time after the middle of June, the plants will not bloom the following winter.

By the above mode of culture, the greenhouse at Battle Abbey has been quite gay with flowering Pelargoniums throughout winter.

About the end of April, cut down those plants which bloomed in winter, and place them in a cool frame: by this means space will be given for those that are to bloom in summer. As soon as

the plants begin to push shoots, repot those that require it, and set them out in the open air, on a floor of coal-ashes : the plants will then flower in August and September.

Cuttings should be struck every year, and cast away, by planting out in open borders, &c. all the old plants.

If "J. T." will attentively adopt the above method of culture, he may have *Pelargoniums* in flower every month in the year. I am ready to admit that the blossoms are not equally fine at every season : they are, of course, finest during the summer period of the year.

The following sorts will flower freely during winter :—*P. glorianum* (Queen of Portugal), Moore's Victory, Red Rover (very good,) Paganini, *P. lucidum*, Brighton Scarlet, La Belle Gabriel, Gower's Masterpiece, *P. dipetalum*, *P. roseum*, Anne Boleyn, Humeii, *P. floribundum*, *carneum*, Grenvillianum, *ignescens*, *ardens*, *coreatum*, *bicolor*, *scabrum*, *candidum*, Man of Ross (very good).

If convenient, a few plants should be placed in a warmer place than a greenhouse in December, which will help them forward for blooming in January and February.

WILLIAM DENYER.

ARTICLE IV.—*On Reviving Plants.* By SNOWDROP.

It may perhaps be useful to state the method I have adopted to recover withered plants. I lately received some Pinks and Carnations from a friend, which had been packed at least 17 days before they came to hand, and had travelled upwards of 160 miles. When I opened the parcel, the Pinks were very much withered ; indeed, the *grass* had nearly become *hay*, and the earth and moss round the roots were perfectly dry : but the Carnations, though in a very bad state, were looking a little greener than the Pinks. I immediately placed them, as they were, with the moss around them, in a pan of spring water, into which I had dissolved some nitre—about a small tea-spoonful to a quart. Here they remained for 24 hours, at the end of which time the Carnations had entirely recovered their fresh green appearance, and in 48 hours the Pinks looked nearly as well. I planted them immediately on taking

them out of the water, and they are now looking as well as any others I possess. A quicker method is stated (*Gard. Mag.* Vol. VIII. p. 339) to be effectual, but this I never tried : it is as follows :—"Camphor is dissolved in alcohol until the latter is saturated ; the alcohol is then put into soft water, in the proportion of two drops to half an ounce. Withered or apparently dead plants put into this liquid, and allowed to remain there from two to four hours, will revive, if they had not been completely dead before being put in."

SNOWDROP.

ARTICLE V.—*On the Cultivation of the Datura arborea.*

By J. T.

Having grown the *Datura arborea* for several years, in a manner very superior to what I have seen it elsewhere, I take the liberty of sending you a short account of my method of treatment ; and if you think it will be useful to any of your numerous readers, it is at your service for insertion in your very useful Magazine. This plant was first cultivated in this country in 1783, and is generally treated as a stove plant. It is readily increased by cuttings, and will last for several years by the following mode of treatment. In May I pot my plants in a pot sufficiently large, as it is not disturbed until the following spring, in a compost of rich loam, with a portion of well-rotted fowls' dung, incorporated together—leaving sufficient room for top-dressings of fowls' dung, that has been held in solution four or five weeks at least : this I repeat three or four times in the course of the season, for which care must be taken to leave plenty of room, as the former dressing cannot be removed. If an old plant, I head it down to about three feet, to prevent its growing too tall, as it will grow four or five feet in one season. I delay this until spring, as it is liable to decay if done sooner. I then place it in the greenhouse, where it will have the greatest advantage of the sun. I water it twice or three times a-week, until it begins to make some shoots ; as the season advances, I water more frequently—in dry, hot weather, every morning, watering over the top at the same time ; if this be neglected, the leaves will drop off. I water twice a-week with water that has held fowls' dung in solution, which is of great advantage during its growth. After it has done flowering, I remove

it to the back part of the greenhouse, and give the water more sparingly during the winter months. This plant is generally grown in stoves, but my experiments have of necessity been confined to the greenhouse, in which it flowers from the end of August till November; but in a stove it will flower as early as June. Its beautiful full foliage, and fine trumpet-shaped flowers, which measure seven and eight inches in diameter, are sufficient recommendation to gain it a place in every collection, and will amply pay every lover of Flora for the extra pains it may require in cultivation.

J. T.

February 12th, 1834.

ARTICLE VI.—*On the Culture of Tigridia pavonia.*
By Miss EMILY ARMSTRONGE.

Your correspondent, Mr. E. EDWARDS, of Staines, went to a very unnecessary trouble in the cultivation of this very beautiful flower, as described by him in the November Number (page 212) of your valuable *Cabinet*; and your correspondent, "SNOWDROP," plants them a month too soon. My treatment is as follows:—The latter end of the month of March, I prepare my beds, consisting of rich loam, leaf-mould, and an eighth part of pit sand; the whole is then well mixed up together, and the surface raked smooth and even. In these beds, about the first week in April, I plant my bulbs about five inches apart and three inches deep, placing a little sand under and round each bulb; they require no further care, except that, if the weather be very dry, they should have a little water given them. When the foliage is brown and decayed, I take up the bulbs, and spread them on a gravel walk till perfectly dry. I then tie them up in bunches of from nine to twelve, according to the size, and hang them up in a store room, having occasional fires in it in cold and wet weather: here they remain till the ensuing season for planting. By the above method, the flowers grow very large, and the blossom is abundant. I hope this plain statement may gratify your correspondent "M. S. Y." of Hampstead.

EMILY ARMSTRONGE.

Castlerahan, Ireland, March 21st, 1834.

ARTICLE VII.—*On the Cultivation of Pinks in Pots.*

By A MIDDLESEX AMATEUR.

Should you think the following worthy a place in your *Florists' Magazine*, I shall feel myself highly honoured by its insertion.

The soil I grow Pinks in is as follows :—Six barrowfuls of well-rotted cow-dung, three do. do. horse-dung, three do. strong loam, one do. coarse drift sand ; which, being well incorporated together I pass through a coarse sieve some time before using it. I always prefer my compost quite dry for potting, which kills the worms. My method of piping is the same as Mr. REVELL's (Vol. I. p. 102). I commence piping when the flowers are in bloom. When the pipings have struck root, I pot them in sixties, placing three in each pot. Here they remain till the latter end of March, when I commence replanting them in sixteens, and again place three plants in each pot, taking care not to disturb the balls of earth. After planting, I water them liberally, which makes them bud freely. The situation I always keep them in has a southern aspect, where there is plenty of pure air. I always place slates under the bottoms of the pots, to prevent worms getting in. I would advise all florists to have but one large hole in the bottoms of the pots, instead of two or three in the sides ; for if the pots stand on the slates, worms will get in at the sides. By this mode of culture, I am certain I have as good blooms as any one.

A MIDDLESEX AMATEUR.

P.S. I shall forward you my method of growing Tulip seed, if you think it worthy of acceptance ; having raised a very many breeders, some of which are very superb ones.—[We shall be much obliged by it.—COND.]

ARTICLE VIII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*

By ST. PATRICK.

(CONTINUED FROM PAGE 108.)

NAMES.	DESCRIPTION.
468 Meduse	Dark purple.
469 Meloni	Beautiful light pink.
470 Mercure	Mottled purple.
471 Merveille du Luxembourg.....	Deep red.
472 Mialis	Dark red and purple.

NAMES.	DESCRIPTION.
473 Milo	Fine light scarlet.
474 Milurie de Montgan	Double white evergreen.
475 Minos	Small scarlet and purple.
476 Miroire Panache.....	Curious white and purple variegated, semi-double.
477 Mirror of Fashion	Fine light crimson.
478 Mitchell's Caroline.....	Pale blush.
479 Mobac	Purple and blue, very double.
480 ——— nouveau	Fine deep red and purple.
481 Mogul	Fine large blush.
482 Monsieur.....	Purplish crimson.
483 ——— George	Brilliant scarlet.
484 Montabello	New. Fine blush.
485 Mordon L'Amay.....	Cherry red.
486 Morning Star	New. Deep red.
487 Morphee	Large deep red.
488 Mort de Virgine	Deep blush.
489 Mount Vesuvius	New. Blazing fine red.
490 Mundi	Fine blush, changing pale.
491 Muscat.....	Fine double white.
492 Napoleon.....	Large flaming red.
493 Ne plus ultra	Immense large light blush.
494 Neron	Blood red.
495 New Cæstrial	Large semi-double blush.
496 Ninon de Seneclos	New. Pretty blush.
497 Nissida bicolor	Red and crimson.
498 Noir de l'Allemagne	Dark velvet, semi-double.
499 North Star	Pretty blush, semi-double.
500 Nouvelle Auguste	Pale blush, almost white.

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

A Botanical Chart; or Concise Introduction to the Linnæan System of Botany. By JAMES RATTRAY, Surgeon and Lecturer on Botany, Glasgow.—(See Advertising Sheet for our May Number.)

The Author observes, "In Dr. SMITH's *Flora Britannica*, at the beginning of every class, there is a synopsis of all the genera belonging to that class, digested according to their orders, and again divided or grouped into sections by certain affinities or obvious characters; and to his excellent compendium we would refer the student for the best generic and specific description of our British Plants."

The two first columns of this Chart enumerate the various parts of a plant, and under their proper heads are given the terms applied to the dif-

ferent forms of these parts, with concise explanations or definitions, illustrated by engraved figures, to which the numbers annexed refer. The remaining four columns give a connected view of the Linnæan system; the first contains the name of the classes, with a short character of each, and a figure in illustration. The next column contains the orders, with cuts illustrative of their characters. In the third column, the genera are arranged according to their orders, with their most common English names; the numbers in this column, within brackets, refer to and indicate the commencement of each order. The other numbers refer to the genera of each class. The last column of the Chart contains a complete list of all the species of the Phenogamous plants, and of the Felices and Musci in Cryptogamia, with the duration, time of flowering, soil, and situation of each. The names of the genera in the orders Algæ, and Fungi, follow, with such a number of the species as could be embraced in this sheet, thus forming a very complete catalogue of *all the indigenous plants* of Great Britain.

The object the Author has had in view is most amply achieved, the Chart contains a mass of Botanical information and description, most fully and clearly illustrated by numerous figures. To persons desirous of obtaining a knowledge of British Plants, in the smallest space, and at the lowest cost, we strongly recommend Mr. RATTRAY'S Botanical Chart. We suggest, in all future editions, that the Author have the names of the species properly capitalised.

The Flower Garden, or Monthly Calendar of Practical Directions for the Culture of Flowers. By MARTIN DOYLE, Author of "Hints to Small Farmers," "Practical Gardening," &c. &c. Dublin, 1834, pp. 170.

In the prefacé to the work the Author states, that "a minute application of the noble science of Botany in a compendious work would be unsuitable and diffuse, each additional page adds to the cost of publishing, and of course to the price of the book;—this is to be of a limited extent and price, and should be dedicated to practical matters, rather than to the Decandrias and Monogynias. Few ladies (he adds) understand Latin and Greek, and the fewer the better." As for myself, I must confess my deficiency in the knowledge of any language except my own, and a smattering of Irish," &c. The work contains monthly information on the culture of flowers, and there are some plain, practical instructions given. The book contains matter worth the cost price, with a good deal that is useless. The Author clearly proves that he understands something of the Irish speech and accentuation, and that his botanical knowledge is very limited.

Plants figured in the following Periodicals for May :—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Cælogyne flaccida*, Drooping Cælogyne. Class, Gynandria; order, Monandria; natural order, Orchidææ. The present genus contains no less than twenty-one species, all natives of the East Indies; but of which very few are at present known in our European gardens; and all that we do possess we owe to the liberality of Dr. WALLICH. From that source the present species was derived, having been received by the Hon. and Rev. Wm. HERBERT, who again communicated it, with many other beautiful and rare orchideous plants, to the gardens at Wentworth House. There the present species flowered in great perfection in February, 1811. Flowers: raceme, eight to ten inches long, drooping, scentless; sepals and petals, pure white; labellum, white, blotched with yellow at the base of the middle of the lobe, and at the base of the disk.

2. *Bletia Shepherdii*, Deep purple flowered. Gynandria, Monandria. Orchidææ. This beautiful plant is a native of Jamaica, having been received from that country by the Messrs. SHEPHERD, at the Liverpool Garden, where it has been long cultivated. It has flowered there, as also at Wentworth Gardens. Flowers, both within and without, of an uniform deep purple colour, except the column, which is pale; and the lamella of the disk of the lip, which are dirty yellow. *Bletia*, from LOUIS BLET, a Spanish Apothecary and Botanist.

3. *Arbutus tomentosa*, Hairy Arbutus. Decandria, Monogynia. Ericinææ. For the discovery of this interesting and very distinct species of *Arbutus*, we are indebted to the venerable MENZIES, who gathered it near the mouth of the Columbia River. Mr. DOUGLAS noticed it growing in rocky places. It was presented to the Glasgow Botanical Garden from the London Horticultural Society, where it flowered in the greenhouse in December, 1833. It is well worthy a place in every collection, bearing copious evergreen foliage, and flowers of a snowy whiteness, well contrasted with the green of the leaves. *Arbutus*, from *Ar boise*, austere bush, referring to the rough fruit.

4. *Euphorbia atro-purpurea*, Blood flowered Spurge. Monœcia, Monandria. Euphorbiacææ. The present species, though it cannot vie with the *E. splendens*, or *punicea*, both of which bear such rich scarlet bractæas, is yet well deserving a place in every greenhouse, from the deep blood-colour of its bractæas and floral leaves, which present a strong contrast to the pale glaucous hue of the rest of the foliage. It is a native of Teneriffe, discovered by M. BROUSSONET, and sent to the Glasgow Botanic Garden, where it blossomed in March. *Euphorbia*, from EUPHORBUS, Physician to JUBA, King of Mauritania.

5. *Cyminosma oblongifolia*, Oblong-leaved. Octandria, Monogynia. Ruteis affinis. A native of the colony of Port Jackson, inhabiting dark, shady woods upon the rivers and immediate coast of New South Wales. It was introduced to Kew Gardens in 1824. It is treated as a hardy greenhouse plant, and blooms in the summer and autumn. Flowers: in a corymb, white, and pale yellowish green, making little show. *Cyminosa*, from *Kuminon*, cumin, or cumin-seed; and *osme*, smell,—on account of its peculiar fragrance.

6. *Calythrix virgata*, Twiggy. Icosandria, Monogynia. Myrtacææ. Synonyms, *Calythrix ericoides*. This plant was originally discovered by Mr. A. CUNNINGHAM, in the hilly country around Bathurst, New South Wales, and he introduced it in 1823 to Kew Gardens. A twiggy shrub, with glabrous stems and branches. It is a pretty growing shrub. Flowers: axillary, small, mostly collected in tufts at the ends of the branches, white, very fragrant. There are two other species in the English gardens. Mr. CUN-

NINGHAM has sent the following list of species :—*C. glabra*, *virgata*, *curtophylla*, *tetraptera*, *decandra*, *Frazeri*, *flavescens*, *strigosa*, *brunioides*, *scabra*, *conferta*, and *microphylla*. Calythrinx, from *Kalux*, a calyx; and *strix*, a hair,—from the remarkable hair-like terminations of the calyx.

7. *Trochocarpa laurina*, Cinnamon-leaved. Pentandria, Monogynia. Epacridææ. Syn. *Styphelia cornifolia*, *Cyathodes*, *Cyathodes laurina*. This is an extremely pretty evergreen shrub, having very glossy evergreen leaves, with parallel nerves resembling those of many of the Laurel tribe, and, like the *Laurus cinnamomum*, of a fine delicate red when young. The genus is confined to a single species. A native of Port Jackson. Introduced to Kew Gardens. Flowers: very small, white. *Trochocarpa*, from *Trochos*, a wheel,—in allusion to the wheel-shaped cells of the fruit.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. Price 4s. coloured, 3s. plain.

1. *Calochortus venustus*, Spotted flowered. Hexandria, Monogynia. Li-liaceæ. A very remarkable and beautiful flowering bulbous plant, sent from California by Mr. DOUGLAS, to the London Horticultural Society. It flowers at midsummer, at which season it contributes, with some other species, to give quite a new feature to the flower garden. It appears to be cultivated without difficulty; hitherto it has been planted in the open border in the summer only; its bulbs have been taken up as soon as the leaves were withered; they have been kept dry till they begin to shoot, which is about Christmas; and then have been planted in pots in the greenhouse, whence they have been again transferred to the open border, as soon as the chance of spring frosts were over. It succeeds in common garden soil. The stems grow about two feet high; the flowers are placed on stiff stalks, and remain expanded for several days. The sepals are green; the petals are pure white at all the widest parts, and yellowish at the base, where they have a deep crimson wedge-shaped stain, terminated by a yellowish spot; above the latter is a deep blood-coloured stain, bordered with yellow; and between the last and the end of the petal is another paler spot of red, without any yellow. [We presume the plant may be cultivated with the same ease and treatment as the well-known *Tigridia pavonia*, Tiger Flower.—COND.] *Calochortus*, from *Kalos*, handsome; and *chortus*, grass.

2. *Lupinus leptophyllus*, Fine-leaved. Diadelphia, Decandria. Leguminosæ. This species is annual. Mr. BENTHAM observes, "It is remarkable for its narrow leaves and hairy surface. It is about a foot high; the spike of flowers is elegantly coloured with bluish lilac, and there is a deep crimson stain in the middle of the standard. The spike is covered with flowers in an irregular manner. It is not so pretty a species as many others of this generally beautiful genus." It probably requires a shady situation. *Lupinus*, from *Lupus*, a wolf, supposed to destroy the fertility of the soil.

3. *Liparis guineensis*, Sierra Leone *Liparis*. Gynandria, Monandria. Orchidææ. A native of Sierra Leone, whence it was brought in 1832, by Mr. WHITFIELD. It is cultivated in the London Horticultural Society's Garden. It requires to be kept in a damp stove while growing, but to be removed to a cooler and dry place as soon as its leaves decay. Flowers: green, small. *Liparis*, from *Liparos*, unctuous.

4. *Portulaca Gilliesii*. (See page 144.)

5. *Limnanthes Douglasii*, Douglas *Limnanthes*. Decandria, Monogynia. Limnanthææ. A neat little autumn-flowering annual, with flowers of a delicate yellow, bordered with white about an inch across, and slightly but most agreeably fragrant. It is rather succulent in all its parts, is quite destitute of hairs, and has all the appearance of being a native of the sides of rivulets, or of moist and shady places. It was sent from California by Mr. DOUGLAS, to the Horticultural Society. *Limnanthes*, apparently from

Limne, a lake; and *anthos*, a flower,—in allusion to the supposed habits of the only species.

6. *Mimulus Smithii*. Didynamia, Angiospermia. Scrophularinæ. This variety was raised by Mr. GEORGE SMITH, nurseryman, Islington, near London, from seed obtained by fertilizing *M. variegatus* with *M. luteus rivularis*. It is a hardy plant, with all the habit of *M. luteus rivularis*, and no doubt requires the same treatment as that species. Flowers: yellow, with five crimson spots, one being upon each division of the petal. *Mimulus*, from *Mimo*, an ape,—seeds being like the face of an ape.

7. *Pernetia mucronata*, Pointed leaved. Decandria, Monogynia. Ericæ. Synonym, *Arbutus mucronata*. This plant is a native of the Straits of Magellan. It is a hardy evergreen shrub, of considerable beauty, on account of the neat appearance and dark colour of its foliage; its flowers are pretty, white, small. It is grown in the garden of WM. HARRISON, Esq., Cheshunt. It has there already acquired a size which is quite remarkable for so small a plant. Within three years it has formed a bush three feet six inches in diameter, and two feet six inches high. Mr. HARRISON cultivates it in peat, as an American plant. *Pernetia*, named after DOM PERNETTY, the author of the account of a voyage to the Falkland Islands.

8. *Calochortus splendens*, Satiny flowered. Hexandria, Monogynia. Liliacæ. Another fine species of Californian bulb, obtained by the Horticultural Society from Mr. DOUGLAS. It requires the same treatment as *C. venustus*. The flowers of *C. splendens* are somewhat smaller than *C. venustus*, and of a purplish lilac colour. The genus *Calochortus* now consists of five species, of which the following is a list, viz. *C. macrocarpus*, *splendens*, *luteus*, *venustus*, and *nitidus*. The four first species only have been introduced into this country.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnean Society. Coloured, 3s.; plain,
2s. 3d.

1. *Nierembergia intermedia*, Narrow-leaved Purple flowered. Solanæ. Synonym, *Salpiglossis linearis*. (See page 119 of the present Volume.)

2. *Pæonia Moutan*; var. *variegata*. Party-coloured Tree Pæony. Polyandria, Digynia. Ranunculacæ. The Earl of MOUNTNORRIS, whose successful culture of the Tree Pæony has been rewarded by the production of several splendid varieties, far excelling any of those imported from China, was so fortunate also as to raise the present fine variety, which is remarkable for its dwarf and almost herbaceous habit. It was raised from seeds of the papavaracea, which his Lordship supposes had been accidentally fertilized by some of the herbaceous species. The flowers are large and showy, six inches across, seldom more than ten petals, white, stained with a deep rose-colour in various parts, the base marked with numerous radiating streaks of violet and purple. The Tree Pæonies are propagated by layers, which should be twisted a little; and the soil best adapted for them is a mixture of vegetable earth. The generic name, *Pæonia*, is derived, according to some, from PÆON, a noted physician of antiquity; and by others (which is much the most probable), from *Pæonia*, a mountainous country of Macedonia, where some of the species grow wild.

3. *Nycterinia Lychnidea*, White flowered. Didynamia, Angiospermia. Scrophularinæ. Synonym, *Erinus Lychnidæ*. This plant forms a pretty border flower during the summer months, thriving in a mixture of sandy peat and loam, and is readily increased both by seeds and cuttings. A supply of cuttings should be put in, in the autumn, and kept in the greenhouse, or in the propagating pit, until the middle of May, when they are to be planted out in the open border. Its blossoms are elegant: the under side of the petals of a livid purple, and the upper of a milk white; tube, purple. The flowers expand only in the evening, or in cloudy weather, and are then

very highly fragrant. It is cultivated by Mr. NEIL, at Canon Mills, near Edinburgh. *Nycteria*, from *nukterinos*, nocturnal—flowering at night.

4. *Alonsoa linearis*, Linear leaved. *Didynamia*, *Angiospermia*. *Scrophularineæ*. Synonym, *Celsia linearis*, *Hemimeris coccinea*. This species was formerly much cultivated in this country, being introduced in 1790, but has now become rare, the *A. acutifolia* having usurped its place and name in most collections. Flowers: scarlet, with dark red at the base. It grows wild in Peru, where it is known by the names of Ricaco and Ricarco, meaning mask-flower. It blossoms there from May to September. This plant is grown in the Chelsea Botanic Garden. *Alonsoa*, named after Don ZENO ALONZO, Secretary to one of the Spanish Viceroy's of New Granada.

The *Cereus speciosissimus* at Woodhall Gardens, in Renfrewshire, Scotland, attains an extraordinary size and beauty. The late excellent Mr. HENDERSON, gardener there, used soil, composed of two parts of rich loam, three of decomposed manure, and one consisting of equal quantities of peat, sand and broken tiles. The plant is placed in a large pot, and trained to the back trellis of a pine stove, where in July, 1833, when I saw it, it occupied a surface of eighty-four square feet, and had three hundred flowers all open at the same time. Mr. DENHOLM, the present gardener, gives this and other species of the Cactus family, a more ample supply of water than is usually done, while they are maturing their flower buds; and to this he attributes, in a great measure, the vigour of the bloom. In winter when the plant is in a state of rest, little or no water is given.—*Gord. Mag.*

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON THE BELLADONNA LILY.—Can you or any of your readers inform me how to make the Belladonna Lily produce flowers, or why they do not blow, though the roots appear quite healthy?

E. EDWARDS.

Staines, April 17, 1834.

ON PELARGONIUM ARDENS.—I have had a plant of the *Pelargonium ardens major* for some years, and changed the description of soil it was in three or four times, but I have not been able to cause it to produce blossoms; the plant has been generally in a healthy state and I have succeeded in increasing my stock, as I have several younger plants. The old plant, as well as the young ones, has generally been kept in a hotbed. Perhaps some of your readers would assist me. I ought to add, perhaps, that I have no Conservatory to turn it out into.

H.

ON EARWIGS.—Will you or any of your correspondents inform a subscriber the easiest and most effectual method of preserving the Magnolia, when in blossom, from the injuries of the Earwig?

A.

April, 1834.

In your Number of the *Floricultural Cabinet* for November, 1833, I find an interesting article on the culture, &c. of the Pansy; but you do not say whether or not they can be cultivated with success in pots. My reason for asking, is, (and probably as I am a subscriber, you will oblige me by an answer by post,) that if they can, I think I can by that means protect them from the rain which so materially injures their colours, and also from insects.

Please to say what sized pots would be most suitable, and whether a small, or large quantity would thrive best together. Several which I purchased, in the spring were taken out of the ground, and since I have had them in pots, the flowers hitherto have been quite different to what the plant produced prior to its removal; but now they seem to be just recovering their natural colour. Is that usual with the Pansey? I fancy, by removing the flowers after they have done blooming, as they die down, though you deprive yourself of their seed, it tends to keep the flowers large and healthy.—You would much oblige me by an early answer.

T. B.

Shrewsbury, May 7, 1834.

ON DAHLIAS.—Two very young Florists will be grateful to any of the readers of the *Floricultural Cabinet*, to inform them which are the best Dahlias to choose the seeds from, so as to ensure double flowers, and if it is possible when seedlings are raised to tell which plants will produce double and which single flowers.

ELIZA AND ELIZABETH.

Ensham, Oxfordshire, May 10, 1834.

ON FLOWERING DUTCH BULBS.—In your March Number, are some excellent directions for the treatment of Dutch Bulbs in pots; but what I am particularly desirous to know is, the management of such Bulbs after they have been flowered in *water*. I am particularly fond of these beautiful flowers grown in glasses, and generally succeed in having them flower very nicely in the winter, as I buy very good roots. But if you, or any of your correspondents, will inform me how to treat them when they have ceased to flower, I shall be extremely obliged. I am aware they will deteriorate, and probably not blow for some seasons again in *water*, but with me they have ceased to flower at all.

Φίλος Φύσιαι.

April 18th, 1834.

ON HARDY FLOWERING SHRUBS.—Doubtless, many of your numerous subscribers, (like myself), have a shrubbery and lawn, as well as flower borders; it would be very useful and interesting, if you would insert in your pages more articles on Hardy Flowering Shrubs. I shall feel particularly obliged, if you will publish in an early Number, the best mode of culture, soil, and situation, of these beautiful and very favourite shrubs of mine, the varieties of Rhododendron and Azalea. Also, if you will give some plans and elevations of small greenhouses and frames, with the probable expense.

In your Number for September last, X. Y. Z. stated, that he had not succeeded in obtaining flowers from the *Glycine sinensis*, synonyme, *Wistaria consequana*. In March, 1830, I received from a Nurseryman a small plant in a pot, eight or ten inches in height. I selected a spot on a south wall, had the earth removed to the depth of 16 or 18 inches, and about four feet over; this space was filled with about equal quantities of light rich loam and bog earth, well mixed. I then shifted and planted it; the first summer it made a shoot 18 inches in length, the next year a strong vigorous shoot from four to six feet; in 1832 and 1833 it produced some exquisitely beautiful flowers of a pale blue colour; and there are now a large number of flower-buds on it, in a very forward state, from extreme mildness of the season.

I have enclosed a specimen of moss or lichen, which is very common here, and grows on almost every tree and shrub in my lawn, except the Portugal and common laurel, and a few others; also, a specimen of grass, which is so abundant, as to become a troublesome weed, in our gravel walks and gardens. Will you have the kindness to inform me, through the medium of the *Floricultural Cabinet*, the names of each, and if you can recommend any particular method of destroying them?

W. T.

P.S. I shall feel much obliged, if you, or any of your subscribers will inform me, through the *Floricultural Cabinet*, the soil, situation, &c. of the *Magnolia glauca sempervirens*. Within a few years, I have had two plants, which, with all my care, have both died.

[The grass is *Poa annua*. The mosses in our next.—COND.]

ON COMPOST FOR CARNATIONS.—I like all *Innovator's* remarks exceedingly, but I do not exactly know what he means, page 50, in his *Carnation Compost*, by "one barrowful of finely ground unburnt sulphate of lime," to give Car-

nations a clear white; for the limestone I have always seen, is as hard as a rock before it is burnt, and I should conceive it would be a most laborious task to pound finely a barrowful, and, therefore, I conclude it is some other material to which he alludes; but I dare say he will enlighten my ignorance on this point, and tell me where I can meet with it. IGNORAMUS.

ON THE AURICULA, &c.—As you are not determined on the reprint of No. 1 *Supplement*, perhaps you may not think it amiss to insert the *plate* of that splendid Auricula in some subsequent Number. Can you, also, inform me what is meant by a pin-eyed Polyanthus?—[An answer in our next.]
April 14th, 1834. D. PEARCE.

Will INNOVATOR, or some equally experienced cultivator, be so kind as to inform me his treatment with Carnations beginning to spindle in their winter quarters; I have consulted, MADDOCK, HOGG's *Supplement*, and MAINE, but they do not mention the subject,—I mean the particulars under the different circumstances. Also, what is the smallest sized pot a two years old Auricula plant can be well flowered in, and the largest size (under any circumstances) that it would be proper to use for any older plant?

Do Auricula and other Composts deteriorate and loose their fertility, by being sun dried in summer, and kept in that state in barrels under cover?
Tyro. C. N.

ANSWERS.

ON DESTROYING SLUGS, &c.—The best means, "AN OLD CARNATION GROWER" can use to destroy Slugs, &c. is to dissolve two drachms of corrosive sublimate (poison) in two gallons of boiling water, and water his plants with the solution; it will also be necessary for him to take every pot out of the frame, and pour in the hole at the bottom a small quantity of the solution, as this is where they generally secret themselves. He need not be afraid to use this as it is perfectly innocuous to the plants, indeed I always fancy it does them good, as it improves their verdure. This solution will also cause worms to rise out of the ground, if poured upon any bed at the close of daylight when they may be gathered up and destroyed. I will now correct an error in the article of mine, upon the carnation; the pots used should be four to the cast, instead of sixteen, as there stated.

INNOVATOR.

ON BLOOMING AMARYLLIS JACOBÆ.—On flowering the Amaryllis Jacobæ, or (which I take to be the same) the *Sperkalia formosissima* of *Sweet's British Flower Garden*, he recommends planting it in the open border, which I have practised with success, in the following manner:

In May, I plant my bulbs in a border of sandy peat and loam, in a sheltered situation, in which place they remain until September. I then take them up and dry them, taking care not to injure the roots. When in bloom, the flowers must be sheltered from rain or rough winds. I keep the bulbs in a dry room until the returning season for planting.

February 12, 1834.

J. T.

ON THE DOUBLE WHITE ANEMONE, &c.—Your correspondent J. MILES, can purchase any quantity of the Double White Anemone, if he means the Anemone nemorosa plena and Trillium sessile, by applying to Mr. JOHN CREE, Nurseryman, Addlestone, near Chertsey, Surrey.

April 23, 1834.

J. W. D.

REMARKS.

ON FLORA'S DIAL, CALENDAR, &c.—Your interesting and ably conducted little Magazine has done more towards encouraging a love of flowers amongst the fair sex than any work of the kind, which has been published of late years. When the first number appeared, it was welcomed by all ranks and degrees, and now I rejoice to say, go where you will you are sure to see the green-covered *Cabinet* lying on the table.

It has been wisely said, that life is a flower garden, in which new blossoms are ever opening as fast as others fade.

Flowers in all ages have been made the representatives of innocence and purity. We decorate the bride and strew her path with flowers; we scatter them over the shell, the bier and the earth, when we consign our mortal blossoms to the dust as emblems of transient joy—fading pleasures—withered hopes; yet rest in sure and certain trust that each in due season will be renewed again!

The love of flowers indeed, seems a naturally implanted passion without any alloy or debasing object as a motive. The cottage has its pink, its rose, and polyanthus. The villa its geranium, its dahlia, and its clematis; we cherish them in youth—we admire them in declining age.

It was my wish and intention to have noticed some few of the wonderful habits of plants, but want of time (not inclination I assure you) obliges me to relinquish the pleasure. I will, however, just mention several instances in which, with a little attention, the love of flowers may serve to beguile many spare moments, and I can only hope the idea may be followed up by some one amongst your talented contributors.

It may be observed, that flowers put forth leaves and blossoms regularly—they may be retarded or accelerated by artificial means. In every species (except man) there is a particular period of the year in which the reproduction system exercises its energies, and this may be said to form a sort of *Floral Calendar*. The *Dial* of Flora may be kept by watching many sorts—thus the day Lily opens at five in the morning, Dandelion at six, Hawkweed at seven, Marygold at nine, Mesembryanthemum at ten. Many plants prognosticate the *weather*, and may be termed *Barometers*—others may be named *Equinoctial*, as they open and shut at fixed hours of the day. From experiments made with plants put into a dark cellar, and others lighted by a lamp, it was observed, that some flowers followed the clock hours in opening and closing—the night blowing plants accelerated their motions. The Sensitive plant accommodated itself to the artificial light in three days, and when restored to the open air, soon recovered its usual habits. This agreeable subject might be pursued much beyond the fair limits of your paper, but I will not allow my *hobby* to trespass too far upon your indulgence; so conclude your well-wisher,

PANSY.

The Grove, March, 1834.

P.S. Can you tell me whether there is such a plant as the *Double White Hepatica*? I have the single white, the blue and pink, double and single. [We never saw one.—COND.]

CHALLENGE!—Twelve gentlemen amateurs, members of the East London Amateur Dahlia Society, held at the Bakers' Arms Tavern, Warner-place, Hackney-road, challenge any twelve gentlemen amateurs, growing Dahlias in the county of Middlesex, to shew, the first week in September, twelve pans of Dahlia blooms, each pan to contain twelve blooms, for any sum above £24—say £24. The blooms to be of their own growth, and the plants must have been in their possession two months prior to the show.—All communications to be addressed to Mr. I. LANSON, Secretary, at the above Tavern.

CAMBRIDGESHIRE HORTICULTURAL SOCIETY.

In consequence of the disappointments which the cultivators of florists' flowers have frequently met with at the Society's exhibitions, by reason of the censors awarding prizes to flowers that in some cases ought to have been set aside as wanting the requisite qualities, and in others by their marked preference of flowers that were but lightly esteemed by the most experienced cultivators, it was deemed expedient to appoint a Sub-Committee of the Cambridge Horticultural Society, who drew up the following rules for the guidance of the censors at the Society's future exhibitions; and on their being laid before the Society, at a general meeting of the members, they were unanimously adopted, with a request that the utmost publicity should be given, and earnestly calling the attention of the florists of other Societies

to them ; as the Sub-Committee expressed a hope that they might be the means of producing a uniformity of taste amongst all the Societies of florists in the kingdom. To obtain this very desirable object, they request the insertion of them in your useful and very extensively circulated *Cabinet* ; and they beg to state that they will be happy to receive, through the same channel, any hints for their improvement.

JAMES TWITCHETT.

Cambridge, April 21st, 1834.

"The Sub-Committee appointed 'to draw up rules by which in future florists' flowers should be adjudged,' beg leave, in submitting their report to the Society, to state, that they are well aware of the difficulty of their undertaking, but have framed the following rules to the best of their ability, and trust that in communicating with other Societies, such rules will in time be made perfect.

" (Signed) {

JAMES TWITCHETT.
RICHARD HEADLY.
ADAM FITCH.

FREDERICK FINCH.
SAMUEL WIDNALL.
EDWARD CATLING.

" Cambridge, 19th March, 1834.

"**HYACINTHS.**—A fine Hyacinth should be of a compact pyramidal form, strong stem, supporting numerous large bells in a horizontal position, the uppermost bell erect, the bells rather convex than flat or hollow ; the colours clear and bright. Those flowers presenting a contrast of colour in the centre of the bells are most esteemed ; only one stem is allowed to each bulb when exhibited for shew.

"**AURICULAS.**—The pips should be large, flat and round, with ground colour equal on every side of the eye, which should be quite circular, *as well as the edge*. The tube a bright lemon yellow, perfectly round, well filled with the anthers or thrum, the eye round and large, the body colour black or violet, the meal fine ; the colour, in green-edged flowers, should be a whole one, not a shaded green. The stem strong and sufficiently long to bear the truss above the foliage—the truss to consist of not less than five full blown pips—only one stem allowed.

"**POLYANTHUSES.**—The pips large, flat and round, with small indentures between each division of the limb, dividing the pip into heart-like segments, edged with bright yellow ; the edge and the eye ought to be of the same colour ; the truss to consist of not less than five full-blown pips, supported on a strong stem, standing well above the foliage.

"**TULIPS.**—The flower large and composed of six petals—these should proceed horizontally at the base, and then turn upwards in the form of a goblet—rather widest at the top. The three exterior petals larger than the interior ones ; the edge of the petals well rounded or with a little indenture at the top. The ground colour of the flower at the bottom of the cup, perfect white or yellow ; and the various colours, whether stripes, flames, feathers or blotches, should be very fine, regular, or bold and distinct, or else elegantly pencilled.

"**ANEMONES.**—A fine flower should be two inches and a half in diameter—the exterior row of petals should be large and well rounded—the centre of the flower well filled up—the bloom of a hemispherical form, colours clear and distinct.

"**RANUNCULUSES.**—The flower ought to be two inches in diameter—the lower tier of petals broad, and gradually diminishing in size, as they approach the centre, which should be well filled up with them. The bloom ought to be of an hemispherical form—the petals not widely separated, nor too close to appear crowded, and to have a pyramidal direction, in order to display their colours—petals broad with perfect edges—colours rich, clear, and brilliant, or if of two colours, clear and distinct.

"**PINKS.**—The petals large and well rounded—edges free from notches—the colours distinct and clear. In laced Pinks, the lacing must be continued round every petal without a break ; in *plain* Pinks, the colouring should be confined to the centre, and no portion on the edge of each petal ; in rose Pinks the dark colour ought, as in laced Pinks, to be continued, without a break, round every petal.

"CARNATIONS.—The flower large, consisting of a number of well-formed petals, neither so many as to give it a crowded appearance, nor so few as to make it appear thin and empty—the petals broad and stiff—the guard ones well rounded, and should rise a little above the calyx, and then turn off gracefully in a horizontal direction, supporting the interior ones, which should gradually taper towards the crown. Bizarres must have three colours in every petal—flakes two—colours strong and bright—the stripes clear and distinct—the fewer freckles or spots the better—all the colours nearly equal, or the most brilliant colour should predominate—the white pure and bright.

"PICOTEES.—The same qualities as to size, petals, crown, and clear white ground, as the Carnations—edge of petals smooth and well rounded. Those flowers which are free from blotch or stripe down the petal, below the coloured edging, are greatly to be preferred to those which are marked and pouncy.

"DAHLIAS.—A fine flower should be of a perfectly circular form—the outer petals stiff, well rounded and cupped—not too much so as to present a quilled appearance, and well filled up to the centre—not in the least degree showing the eye—neither should the eye be at all sunk or flattened, but rather elevated above the other parts when in full bloom—the whole flower presenting a true circle when viewed above, but of a hemispherical form when observed at the side. Those flowers possessing two colours, to have them clear and distinct."

REFERENCE TO PLATE.

1. *Manetta glabra*. Tetrandria, Monogynia, Rubiaceæ. This is an exceedingly elegant plant; its long scarlet blossoms contrasted with its deep green foliage, render it one of the most beautiful objects that can well be conceived. It was raised at Mr. NEIL'S, Canon Mills, near Edinburgh, from seeds sent from Buenos Ayres. The stems twine to the height of a yard, or more. It thrives well in peat and loam, and is readily increased by cuttings. It succeeds well in the open border during summer.

2. *Salvia angustifolia*. A native of dry mountainous places in the temperate parts of Mexico. It grows well in any light soil, is readily increased both by seeds and cuttings, and requires protection in winter, being no more than an annual if kept in the open border. It blooms very freely in the open border. Grown in most public nurseries.

3. *Portulaca Gilliesii*. Polyandria, Monogynia, Portulacææ. It is a truly splendid plant, and to be seen in perfection, it should be exposed to the greatest heat and the brightest light that our summers will supply. It then opens its rich rosy crimson flowers in considerable quantity. It grows only a few inches high, is a perennial, and blooms most of the summer season. It is grown in the London Horticultural Society's Garden, also at the Glasgow Garden. It is a native of the plains of Mendoza. It requires a dry greenhouse or frame for winter protection.

4. *Tropæolum tricolorum*, Three-coloured Indian Cress. (Nasturtium of many.) A beautiful climbing plant, which will grow and bloom freely in the open borders during summer. It is readily propagated by cuttings.

FLORICULTURAL CALENDAR FOR JUNE.

But little general or particular directions are required for this month, as most of planting, sowing, and potting will be over. Roots of Ranunculuses or Anemones, whose foliage is decayed, should be taken up. All plants in pots must be regularly attended to with a free supply of water, particularly on evenings. Carnations and Pinks should be layed or piped at the end of the month. Auriculas and Polyanthuses should be potted and placed in a shady situation. Cuttings of *Garden Roses* now put off under a hand-glass, shaded, will soon strike root. Seedling Carnations should now be planted out in beds.

F. F. A.



Salvia dolichostachya



Ipomoea Horsfallii



Eschscholtzia crocea



Calceolaria amackoviata
var. refulgens

J. & J. Parry Sc.

Echites stellaris



Royal Sovereign Tulip.



Barnard's Formosa.

THE
FLORICULTURAL CABINET,

JULY 1st, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Culture of the Ranunculus.* By
INNOVATOR.

As you have already given your readers two Articles on the cultivation of the *Ranunculus*, perhaps you may consider any more superfluous; but as my mode of treating this beautiful flower is so widely different from what is generally practised, I send it you, leaving it to your judgment whether you will give it a place in your valuable Magazine. I can assure you it is superior to any other plan I have seen tried; and the next to it is that of Mr. CARR.

I prepare my bed, which is three feet wide, in October; but any time between this and the day of planting will answer. I remove all the natural soil to the depth of a foot. Having procured a sufficient quantity of fresh cut flag from a heavy-land pasture, three inches thick and twelve wide, I place it in the trench as even as possible, with the grass side down, taking care to fill up firmly all the seams with mould. It will take four layers of flag to fill the trench. When full, I tread it down as even as possible, and let it lay till the time of planting, about the middle of February; when I lightly rake over the surface, and place my roots upon it in six rows; these I cover with a little white sand, and then cover the whole an inch deep with fine rich heavy loam. If severe frost or heavy rains set in before they are well up, I cover them with straw mats. When they are throwing up their flower

VOL. II.

U

stems, I supply them with plenty of rain or river water, poured between the rows, and continue it till the bloom is over. During the time of flowering, it is necessary to protect them with an awning from sun and rain. As soon as the grass turns yellow, I take them up, and, when dry, store them away in paper bags with their respective tallies. After I have taken up my roots, I keep the bed free from weeds till October, when I take off the inch of soil that covered the roots, and spread over the bed, an inch thick of fresh cow-dung. This gets well washed into the soil by the time of planting, when I again rake over the bed, and plant as before. I never dig it over, but when the roots are taken up after the second year's growth, I take out all the rotten flag, and store it away for my Carnation compost, to be mixed up in September. for which it answers admirably. I had sixteen hundred roses grown in this way this last season, and not more than thirty missed flowering. Mine were universally allowed, by all those who saw them, to be the best they had seen last year, but certainly very inferior to what they generally are, as I have seldom a root that does not throw up four or five flowers. INNOVATOR.

May, 3rd, 1834.

ARTICLE II.—*On the Culture of Fuchsia virgata.*

By Mr. W. DENYER, Gardener to Lady WEBSTER,
Battle Abbey, Sussex.

Having recently become a subscriber to the *Floricultural Cabinet*, and to the *Gardener's and Forester's Record*, I beg to say that I have been much gratified with the useful information they are calculated to impart, not only to the inexperienced, but to the practical gardener also. In perusing the pages of the *Cabinet*, I have seen two or three good treatises on that graceful genus the *Fuchsia*; but as no one has said any thing in particular on *F. virgata*, I wish to say a little in its favour, and to recommend it as being far the best of all the genus for the flower garden, and for fronts of shrubbery gardens. *F. gracilis* is a noble and graceful plant when well grown, but it does not commence flowering in the open border so soon as *virgata* by three weeks or a month, neither does it flower so late by six weeks or more, which is a great

object in the autumn of the year. *F. conica*, *tenella*, *microphylla* &c. will all flower well in the borders, and make a good variety: but experience has taught me that they are all far inferior to *F. virgata* for that purpose. Towards the end of April, *F. virgata* has put on its green robe; it then begins to put forth its beautiful scarlet pendant blossoms, and so it continues till near the end of December.

Mode of Treatment.—If cuttings were not put in in autumn, they should be put in the first week in March. For this purpose, take some of the short side shoots; dress off their bottom leaves, and cut them through close under a joint; then insert them into a pit, which is drained, and filled up with a mixture of peat and sand: water them well, with a rose on the water-can: then put them in a hot-bed frame, as soon as their leaves are a little dry. In two or three weeks they will be fit to pot off in 60-sized pots. The soil for this purpose should be a mixture of peat, loam, and rotten dung. They should then be put into the hot-bed frame again for a few days or a week at the expiration of that time, remove them into a cold frame or greenhouse. About the middle of April, re-pot them into 48's, using the same sort of soil as above named. The first week in May set them out in a sheltered situation. About the middle of May, plant them out in the borders: at the same time, water and tie them up. They will then begin to flower freely, and make fine plants the first season. Towards the end of November, cover their roots with old tan, or leaf mould. If the winter should prove severe, put three stakes around the plants, and tie them at the top in the form of a triangle: then put a piece of mat around, and fasten it with a skewer or two, which is soon done: but this must not be put on except on very sharp nights. In March cut their branches into four, six, or eight inches, according to the size and shape of the plant. They make the handsomest plants when they are trained to a single stem, and allowed to branch out around. They present a fine figure when put in the centre of a small wire basket, and the wire furnished around with *Anagallis monelli*, *Lobelia gracilis*, *Eschscholtzia californica*, &c. Young Plants of *Fuchsia virgata* will keep their leaves on, but after they are a year old, they become deciduous. They often throw up strewn suckers, which, if taken off in

March, and potted, will make fine plants, and be fit to turn out in May.

If you think these remarks worth a place in your Cabinet, they are quite at your service.

W. DENYER.

February 6th 1834.

ARTICLE III. — *On the cultivation of Dutch Bulbs in Pots.* By Mr. THOMAS APPLEBY, Gardener to the Rev. J. A. RHODES, Horsforth Hall, near Leeds.

To flower these bulbs in pots to perfection, they should, as soon as received, be planted in pots five inches wide and six deep, in a rich compost of loam, vegetable mould, and well rotted cow-dung, in equal parts well sifted, and mixed with one-eighth of fine sea-sand, or where that cannot be got, fine river sand, with a small portion of salt added, will do. Procure some oyster shells, and lay one partly over the hole at the bottom of each pot, and another resting upon it, to form a good drain. Then put as much soil in (having it rather dry) as will allow the bulb to be just covered within the rim of the pot, press it firmly down in the pot with the fingers, or a blunt piece of wood made for that purpose; this is to prevent the roots going too quickly through to the bottom. Place the bulb upon the soil, and fill up round it, pressing it hard down also, to prevent the bulb from rising when it begins to throw out roots. Give them a gentle watering, and plunge them into a cold frame, covering them two inches deep over the bulbs either with rotten tanner's bark or sifted coal ashes. They must remain here until they break through the covering, and then remove them into the greenhouse to flower. Should they be wanted to flower in February or March, or even earlier, they must be placed the month before in a stove or forcing house, to bring them forward.

Such of your readers as may not have the convenience of frames, greenhouses, &c., may place their pots of bulbs in a cellar or any outbuilding, covering them as before described; and as they make their appearance, bring them into the windows to flower in succession—only do not suffer them to get much above the covering, before they are removed into the light and air, or they will be drawn and blanched.

The foregoing treatment applies only to Hyacinths, Narcissuses, early Tulips, Jonquils, Crocuses, and Amaryllis Jacobæa, if imported.

THOS. APPLEBY.

January 4th 1834.

ARTICLE IV.—*On the culture of the China Rose.* By Mr. W. MOUNTFORD, Warleigh Gardens, near Bath.

In cultivating the Rosa odorata, or Tea-scented Rose, I have practised the following method with great success: Early in January or February, I take some pots of plants into a stove which is heated to 60 or 70 degrees of heat. In the course of a short time, there are some young shoots ready, which, as soon as they have five or six leaves, I take off, and strip some of the under leaves from them, finishing them with a clean cut at a joint. Having prepared the cuttings, I next prepare some 48-sized pots with two parts fine sand, one part sandy peat, and one part leaf-mould. I then insert several in each pot, and with a fine rose watering pot, give them water just sufficient to settle the earth. I then plunge them into a hotbed frame—or they will strike equally well in the stove, provided they are covered with a small bell glass. After they have taken root, I pot them off into 60's using at this time sandy loam and leaf-mould. About the middle of May, I turn a quantity out into the beds and borders in the flower garden where they bloom exceedingly well, and fill the air with that delicious fragrance that is exhaled from them. The remainder I keep in pots, to supply any place that may require them.

If the above is worthy a place in your Florists's Magazine, you are at liberty to insert it.

W. MOUNTFORD.

Warleigh Gardens, Dec. 8th 1833.

ARTICLE V.—*On raising Dahlias from Seed.* By Mr. D. PEARCE.

Two of your Correspondents having expressed a desire for information of raising Dahlias from seed, I now subjoin a few remarks, hoping they will prove acceptable.

About the beginning of April, a friend of mine gave me a quantity of Dahlia seeds, which he informed me had been saved from very fine double flowers, and various colours.

About the 7th or 8th I sowed the seeds pretty thickly in pots, in a very light and rather sandy soil, I then plunged the pots in a hotbed made of about a barrowful of horse-dung. After watering and plunging the pots into the bed, I covered the surface of the pots about four inches thick of horse-dung, and placed a large hand-light firmly over the bed to exclude the air. The dung used for the hotbed was not fresh from the stable, but was taken from the middle of a large heap, and partly decayed, so that the heat of the bed was moderate, but by being made in a part of the garden exposed to the heat of the sun, the heat was sufficient to cause the seeds to vegetate. At the end of the first week after being sown, I examined the pots to see if any seeds had appeared, by clearing off the dung, but none having appeared, I again replaced the dung and covered with the glass. At the end of the second week I again examined them, when about one or two of the seeds in each pot were just appearing. I then cleared the dung off the surface of the pots, and allowed them to enjoy the sun and air every day till evening, by raising the light at each corner about four inches, but taking care to shut close at night. When the first pair of leaves (exclusive of the first large fleshy ones) appeared, I planted them out on a bed of very light soil about four inches apart, taking care to keep the soil moist. They have now most of them made strong little plants; and I am now about finally transplanting them to remain for flowering; and having about 250 plants, doubt not but that I shall have at least a few fine ones. The plants appear fond of moisture; therefore, whenever the surface of the soil becomes dry (which in my garden is every morning) the plants should be attended to. With respect to impregnating them, I should consider those flowers which form the greatest contrast to be the most proper to be acted upon, such as impregnating crimson, scarlet, lilac, rose, &c. on a pure white, or yellow, and the manner of applying the pollen the same as recommended by Mr. Tyso for Ranunculuses.

D. PEARCE.

ARTICLE VI.—*On Flowering Plants, suitable for a Bed, upon a Lawn.* By Miss EMILY ARMSTRONGE.

On the 23d day of May, I perused an article in your excellent periodical, named *The Floricultural Cabinet*, signed VIOLET, Vicarage, Wilts, requesting the names of Perennials, Annuals, and Shrubs, to occupy two beds, in a lawn, soil loamy. At this request, being a Sister Priestess, I transmit this article to the Editor, on the 28th day of the same month, for insertion; and recommend the following select collection to VIOLET'S consideration, as uniting beauty of colour, easiness of culture, long continuance in bloom, and adapted to the soil, as stated by him.—Perennials, Double Ragged Robin, varieties, red and white; Double Catchfly, red; *Lychnis*, scarlet; *Potentilla* (cinquefoil), *Russelliana* and *Nepalensis*; *Lychnidea*, varieties, lilac and white; *Monarda*, scarlet: Mule Pink, red; Double Rocket, white; Siberian Larkspur, purple, a lively plant; the above about two feet in height, except Mule Pink, red; Lofty Bee Larkspur, five to six feet; Mullein, same; Tree Primrose, three feet; Neapolitan Violet, humble in growth, spreads freely, flowering during summer and autumn.—Of Annuals, the *Clarkia*, *pulchella* and *alba*; Sweet Pea varieties; *Enothera Lindleyii*, German Aster, and large white Candy Tuft, I would prefer. Shrubs, moderate in size, elegant in outline,—*Cytisuses*; Red-flowered Bladder Senna; Persian Lilac; Scorpion Senna; *Aculba Japonica*; *Fuchsia gracilis*, being hardy; Lupin tree, together with Moss, Velvet, Blush, Provence, and Cabbage Rose trees. These are a small portion of what I have cultivated these many years past. New varieties may be suggested by other correspondents; but the question is, will they thrive in the soil mentioned by you, or are they more beautiful in colour than those above mentioned?

VIOLET would find Roses trained to wire trellis work or pillars of Roses, extremely handsome; the pillars could be formed of wood, less expensive than iron.

EMILY ARMSTRONGE.

Cavan County, May 24th, 1834.

ARTICLE VII.—*On Poisonous Plants.*

By INNOVATOR.

In sending you an Article upon Poisonous Plants, I am stepping a little out of my way, as it should have been the production of a medical amateur. I shall, however, endeavour to render it as intelligible as possible, by adhering to common terms. Vegetable Poisons are usually divided into two classes—the one called Stupifying, and the other Irritating.

THE STUPIFYING ARE AS FOLLOWS:—				
Common Name.	Botanical Name.	Class.	Order.	Where found.
Strong-scented Lettuce.	<i>Lactuca virosa</i>	Syngenesia.	Polygamia	Chalky banks.
Bane Berries	<i>Actaea spicata</i>	Polyandria	Monogynia	Mountains.
White Poppy	<i>Papaver somniferum</i>	Gynandria	Hexandria	Fields.
Birth Wort	<i>Aristolochia Clematitis</i>	Enneandria	Monogynia	Among ruins.
Camphor	<i>Laurus Camphora</i>	Icosandria		In greenhouses.
Common Laurel	<i>Cerasus</i>	Dicæa	Dodecandria	In pleasure-grounds.
<i>Cornus Indicus</i>	<i>Menispermum Corulus</i>	Pentandria	Monogynia	In some gardens.
Deadly Nightshade	<i>Atropa belladonna</i>			On chalky wastes.
Henbane	<i>Hyosciamus niger</i>			By road-sides.
Thorn Apple	<i>Datura Stramonium</i>			Old dunghills.
Tobacco	<i>Nicotiana Tobacum</i>			Grown in gardens.
Woody Nightshade	<i>Solanum Dulcamara</i>			Hedges.
Darnel	<i>Lolium temulentum</i>	Triandria	Digynia	Fields.
Foxglove	<i>Digitalis purpurea</i>	Didynamia	Angiospermia.	Hedges and gardens.
Fool's Parsley	<i>Cethusa Sinapium</i>	Pentandria	Digynia	Fields.
Hemlock	<i>Cornium maculatum</i>			Hedges.
Water Hemlock	<i>Cicuta virosa</i>			Watery places.
Herb Paris	<i>Paris quadrifolia</i>	Octandria	Trigynia	Woods.
Leontopodium	<i>Eryvum Eryilia</i>	Diadelphia	Decandria	Woods.
IRRITATING, AS FOLLOWS:—				
Celandine	<i>Chelidonium majus</i>	Polyandria	Monogynia	On shady banks.
Bearsfoot	<i>Helleborus foetidus</i>		Polygynia	On chalky soils.
Butter Cups	<i>Ranunculus acris</i>			Pastures.
Black Hellebore	<i>Helleborus niger</i>			Greenhouses.
Lesser Spear Wort	<i>Ranunculus flammula</i>			Marshy grounds.
Pasque Flower	<i>Anemone pulsatilla</i>			Chalky meadows.
Virgin's Bower	<i>Clematis vitalba</i>			Chalky hedges.
Water Crowfoot	<i>Ranunculus sceleratus</i>			Watery meadows.
Bitter Apple	<i>Cucumis colocynthis</i>	Monæcia	Syngenesia	In plant stove.

IRRITATING—(CONTINUED).				
Common Name.	Botanical Name.	Class.	Order.	Where found.
Euphorbium	Euphorbia officinarum	Monæcia	Syngenesia	In plant stove
Bryonia	Bryonia dioica.....	.....	Pentandria	Hedges.
Elæterium	Momordica elæterium.....	.....	Monadelphia	Cultivated in gardens
Purgin Nut	Ricurus major.....	.....	.....	do.
Wake Robin	Arum maculatum.....	.....	Polyandria	Old banks
Crown Imperial	Fritillaria imperialis	Hexandria	Monogynia	Gardens
Dafodil	Narcissus pseudo Narcissus.	.....	.....	Gardens and meadows
Squill	Scilla maritima	Syngenesia .....	.....	Gardens
Cardinal Flower	Lebelia siphilitica .....	.....	.....	Do.
Gamboge	Stalagmatis Camb	Polygamia .....	.....	In pleasure grounds
Hedge Hyslop	Gratiola officinalis	Dianthia	Monogynia	In gardens
Hemlock Dropwort	Epanthe crocata	Pentandria	Digynia	Moist places
Marsh Penny Wort	Hydrocotyle vulgaris .....	.....	.....	Do.
Poison Oak	Rhus toxicodendron .....	.....	.....	In some gardens
Water Hemlock	Phillandrum aquaticum .....	.....	.....	Watery places.
House Leek	Sempervivum tectorum	Dodecandria .....	.....	Roofs
Heart's Ease	Viola tricolor	Pentandria	Monogynia	Gardens and fields
Ipecacuanha	Cephaelis Ipecacuanha .....	.....	.....	Greenhouses
Scammony	Convolvulus scammonia.....	.....	.....	In gardens
Louse Wort	Pedicularis palustris	Didynamia	Angiospermia.....	Boggy pastures
Monk's Hood	Aconitum napellus	Polyandria	Trigynia	In gardens
Staves Acre	Delphinium Staphisagria.....	.....	.....	Do.
Meadow Safron.....	Colchicum autumnale	Hexandria .....	.....	Rich pastures
Mezerion	Daphne Mezereon	Octandria	Monogynia	In gardens
Spurge Laurel	— Laurcola .....	.....	.....	In woods
Savine	Juniperus Sabina	Dizæcia	Monadelphia	Shrubberies
White Hellebore	Veratrum album	Polygamia	Monæcia	Gardens
Wall Pepper	Sedum acre	Decandria	Penatgynia	Old walls
Yellow Rhododendron ..	Rhododendron Chrysanthamus.	.....	Monogynia	Cultivated in England

The foregoing produce (when taken into the stomach) giddiness, confusion of sight, wildness of the eyes, palpitations, loss of memory and voice, stupor, nausea, vomiting, with great distention of the stomach, and convulsive twitchings. The only treatment I can recommend persons to adopt in cases of urgent necessity, where a medical man is not to be had, is to give an emetic composed of about 20 grains of sulphate of zinc (commonly called white vitriol and white copperas), in a wine-glass of warm

water, every ten minutes, till the stomach is thoroughly cleared of its contents. A tea-spoonful of hartshorn will frequently prevent them from falling into a state of stupor. In cases of poisoning from Mushrooms, it will be first proper to empty the bowels by means of Epsom salts and castor oil, and then take a tea-spoonful of æther every two or three hours in some mucilaginous drink. Poisonous Mushrooms may generally be known by their substance being softer, more open, more porous, and moister, than edible; they have besides a more disagreeable appearance, a more humid and dirty surface. Those which are dusky, or change colour when cut, or exhale an unpleasant smell, or have a gaudy colour, or very distinct hues, particularly if they have been originally covered by an envelope, and are found in moist or shady places, should not be eaten. Those having short bulbous stalks, or fragments of skin sticking to their surface, or which grow rapidly and corrupt quickly, should be rejected. Too much caution cannot be given by parents to servants, to prevent their children from gathering the berries of the two Nightshades, and the Wake Robin, as they are frequently made the playthings of children, when out taking the air. Your medical readers must excuse my taking this upon me, as none of them shew any disposition to answer X. Z.; but they may, if they choose, charge me with being an

INNOVATOR.

ARTICLE VIII.—*Remarks on the colours and properties of one Thousand Species and Varieties of Roses.*

By ST. PATRICK.

(CONTINUED FROM PAGE 134.)

NAMES.	DESCRIPTION.
501 Nouvelle favourite	Fine tinged blush
502 ——— Parisienne	Large blush
503 ——— redente	Fine small bright red
504 ——— Valine	Light purple and blue
505 Nubienne	New, purple
506 Octavie	Fine blush, changing white
507 Odeur de dragées	Immense fine large double blush
508 Olio	Light blush, grows in large clusters
509 Ornement du Paradis	Fine lilac
510 Orson	Bright blush
511 Ortenio	Pinkish blue
512 Pallid a de Marbanne	Beautiful scarlet
513 Panache superbe	Gay rosy scarlet; striped with white
514 Paraquet	Striped light scarlet

NAMES.	DESCRIPTION.
315 Paris Purple	Pretty
316 ——— Virgin	Small deep blush
317 Parni	Light purple
318 ——— superbe	Large scarlet, very double
319 Passe Virgil	Beautiful mottled purple and red
320 Patriotism	Fine bright pink
321 Paul Fry	Curious purple
322 Pavot	Pretty blush
323 Pelagi	New fine deep blush
324 Penelope	Fine deep crimson velvet, edged with purple
325 Perci	Large crimson
326 Perle brillante	Pink red
327 ——— de L'orient	Fine mottled crimson
328 ——— de Washington	Fine large pale blush
329 Petite Blanche	Small white
330 ——— Caroline	Small bright red
331 ——— Erneste	Fine deep red
332 ——— et Belle	Small changeable purple
333 ——— Mandarin	Small pale purple
334 ——— Panache	Variegated red
335 ——— Pourpres	Small purple
336 ——— Portugaise	Small light scarlet
337 ——— Pouapres de St. Cloud	Small purple
338 ——— rouge D'Antriche	Curled variegated red
339 Phœbo	Beautiful fine purple
340 Phillipine	Superb purple
341 Philipe quartre	Small double crimson pink
342 Pierre le grand	New, very fine bright red
343 ———	Large purple red
344 Pimpernelle	Very pretty straw colour
345 Pivoine	Very large deep blush
346 Pizarro	Small red
347 Pluto	Nearly black
348 Polyanthus	Rich crimson, tinged with purple
349 Pomonia	Mottled purple
350 Pourpon Bazarre	Small compact pale blush
351 ——— carnee	Pale blush
352 Porcelaine	Large blush
353 Portlandica	Close deep purple
354 Pourpre bienfaite	Fine mottled purple
355 ——— de la Grece	New, splendid purple
356 ——— du Prince	Large fine purple
357 ——— corceux	Curious purple
358 ——— sanspareil	Changeable purple
359 Pourpres antique	Curious scarlet and purple spotted semi-double
360 ——— lege	Beautiful light purple
361 ——— le plus Magnifique	Bright curled purple
362 ——— proxances	Large purple
363 ——— fincelles	Very fine mottled purple
364 ——— tres changeable	Dark purple, changing light
365 ——— velontes	Very fine velvety red
366 Premier Noble	Small crimson
367 Prince de Salve	Large beautiful red
368 ——— d'Orange	Large deep crimson
369 ——— Henry	Red
370 ——— Magnifique	Small pretty pale red
371 ——— Regent	Large bright scarlet
372 ——— Talleyrand	Fine double crimson
373 Princesse	Crimson

	NAMES.	DESCRIPTION.
574	Princesse Elegantine	Large blush
575	— Elizabeth	Large scarlet
576	— de Nassau	Light blush and crimson
577	— Maria	Rosy blush
578	Prolific	Semi-double light red
579	Proserpine,	Rich velvety purple
580	— nouveau	Flamed brimstone
581	Purple Crown and Crown	Very singular
582	Pusselle de Bignion	Fine deep blush

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

A Catechism of Gardening, intended for the Use of Village Schools and Cottages; containing plain and brief Directions for cultivating every kind of Vegetable in Common Use. By AN OLD PRACTITIONER. Pamphlet, 12mo., 50 pages. London: Ridgway and Sons. 1834.

Having carefully read over this very excellent little work, we can most confidently recommend it to our readers; it is well calculated for the purposes intended. The wealthy part of the Community who are anxious to encourage cottagers in a taste for gardening, would be rendering essential service thereto, by presenting to cottagers, schools, &c., copies of this pamphlet. The plan of the work is by Query and Answer; the following chapters treating on the various departments of garden operations comprise the contents, with a calendar for work to be performed in each month of the year.

Chap. 1.—Of the operations of gardening, as trenching, earthing up, planting, weeding, &c. 2.—Cultivation of tubers, as potatoe, turnip, carrot, &c. 3.—Cultivation of stems, as asparagus, onion, sea kale, &c. 4.—Cultivation of leaves, and leaf stalks, as cabbage tribe, lettuce, &c. 5.—Cultivation of esculent flowers, as cauliflower, brocoli, &c. 6.—Cultivation of esculent pods, seeds, &c., as peas, kidney beans, &c.

Letters on the Consumption of Malt, addressed respectively to the Farmer, Labourer, and Labourer's Friend. By F. SKRIMSHIRE, M.D. Pamphlet, 8vo, 31 pages.

The observations and instructions addressed to each class are truly serviceable and well written. We wish the pamphlet universal circulation, and

more particularly, admission to every dwelling in Britain. We would have made an extract from the pamphlet, but recommend the purchase of it; the whole being so useful, and, lamentable to add, the remarks so highly necessary and applicable, by the practices of innumerable multitudes of persons at this enlightened age.

Plants figured in the following periodicals for June:—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured, 3s. plain.

1. *Colvillea racemosa*, Splendid Colvillea. Class, Decandria; order, Monogynia; natural order, Leguminosæ. This truly splendid plant, worthy of bearing the name of his late Excellency Sir CHARLES COLVILLE, governor of the Mauritius, to whom it was dedicated by its discoverer, is probably a native of the East coast of Africa; but was only seen by Professor BOJER in 1824, in the Bay of Bornbatoe, on the western coast of Madagascar, where a single tree was cultivated by the inhabitants. That indefatigable naturalist raised it from seeds which he took to the Mauritius, where it has perfectly succeeded; and we may soon expect to add this most ornamental plant to the stoves of our own country. Its flowering season in the Mauritius is April and May. The tree grows from forty to fifty feet high, and produces its fine red flowers in great abundance. It has the aspect of *Poinciana regia*, but with a thicker trunk and more ample foliage.

2. *Milla uniflora*, Single flowered Milla. Hexandria Monogynia. Asphodelæ. The credit of discovering this very pretty plant is due to Dr. GILLIES, from whom we possess specimens, gathered in 1820, on "banks near Buenos Ayres," and marked "*Milla*, Nov. Sp." In June, 1832, Mr. NEIL received roots from the same place, gathered by Mr. TWEEDIE, which flowered in the greenhouse at Canon Mills, in December of the same year, and again in March, 1834. Dr. GRAHAM is assuredly correct in keeping it distinct from the Mexican *Milla biflora* the only other species known to exist. The stamens alone would afford a distinguishing character, in *biflora* being constantly equal, and in the present plant as regularly alternately smaller. The corolla is one inch and a half across when expanded, six cleft marked from the base of the tube to the apex of the segments with six dark lines which are purplish green behind, lilac in front. The genus was named by CAVANILLES, in honour of JULIAN MILLA, head gardener at the Royal Garden at Madrid. When bruised, our species yields the most powerful smell of garlic.

3. *Gastrolobium retusum*, Blunt-leaved Gastrolobium, Decandria, Monogynia, Leguminosæ. This pretty little shrub was first raised at the Botanic Garden, Edinburgh, in 1831, from seed brought home by Dr. LANG, from New Holland, and again in 1832, from seed communicated by her Grace the Duchess Countess of Sutherland. It first flowered in December 1833, and the same plant much more freely in March 1834. The corolla is twice as long as the calyx, orange-yellow, of deeper and richer colour before expansion. *Gastrolobium*, from *gaster*, a belly, and *lobos*, a pod.

4. *Catasetum tridentatum*, var. Three-toothed Catasetum, var. *syn.* *Catasetum macrocarpum*, C. Claveringi floribus majoribus, C. floribundum. This species is exceedingly liable to vary in the size and marking of the flowers (scarcely any two being exactly alike in these respects,) and in the number of blossoms upon a raceme. The plant now figured, for which and for the drawing of the foliage we are indebted to Mrs. C. HORSFALL, of Everton. Liverpool, was given to Mr. HORSFALL by Mr. HENRY HARRISON, who

imported it from the Brazils. It has, as Mr. EVANS (the able gardener) observes, an aromatic smell, and larger flowers than *C. tridentatum*. Flowers, showy, green with purple spots, and yellow. *Catasetum*, from *Kata*, downward, and *seta*, bristle,—alluding to two horns of the corolla.

5. *Pimelia hypericina*, *Hypericum* leaved. Diandria, Monogynia. Thymelææ, an ornamental slender shrub, rising three or more feet in height, crowned with numerous heads of pale yellow flowers. This species was discovered by Mr. WILLIAM BAXTER, at King George's Sound. When treated as a hardy greenhouse plant, it thrives vigorously, and in its season puts forth its flower heads in abundance. It blossoms from April to June. The species was raised in this country from seeds received from New South Wales, to Kew Gardens in 1829. *Pimelia*, from *Pimle*, fat.

6. *Arabis verna*, Early flowering Wall Cress. Tetradymania, Siliquosa. Cruciferae. Synonym, *Hesperis verna*. An extremely pretty annual, especially when cultivated in tufts, the very vivid purple blossoms making a handsome appearance. The plant grows about four inches high; the flowers are terminal, three to four in each head. In the Glasgow Botanical Garden it has flowered the same season as in Naples. It is well suited to ornament rock work. *Arabis*, from *Arabia*.

Edward's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. Price 4s. coloured, 3s. plain.

1. *Pœonia Moutan*; *albida plena*, Double White Tree Pœony. Polyandria, Monogynia. Ranunculacææ. This noble variety of the Tree Pœony was raised by the Earl of MOUNTNORRIS, from seeds of *P. papavaracæa*, saved at Arley Hall. It differs from the original it being semi-double, and in having narrower and more lacerated petals. Pœonia, from PÆON, a physician who first used it in medicine.

2. *Platystemon Californicum*. Polyandria Polygynia. Papavaracææ. A native of California, whence it was sent by Mr. DOUGLAS, to the London Horticultural Society, in whose garden it flowered last September; the few seeds it produced have failed to vegetate, and the plant is, therefore, lost to our gardens. The plant is annual, seldom obtaining above a foot in height; the flower stems are only one flowered, which is terminal. The flower is small, yellow, with occasionally a reddish tinge outside. The flower is sweet scented it blooms at the end of the summer. *Platystemon*, from *platus*, broad; and *stemon*, a stamen; in allusion to the breadth of the filaments.

3. *Eschscholtzia crocea*, Saffron coloured. Icosandria. Polyandria Tetracynia. Papavaracææ. In general habit, foliage, and size of the flower, this new species closely resembles the *E. californica*, and introduced by Mr. DOUGLAS on his first expedition. *Eschscholtzia*, from Dr. ESCHSCHOLTZ.

4. *Aristolochia Chilensis*, Chilian Birthwort. Gynandria, Alexandria, Aristolochiææ. Very common in Chili; Mr. BRIDGES sends it under the name here adopted, adding that it is called by the Chilenos, Oreja de la Zoera, and that it is an herbaceous plant, found in stony places near Valparaiso and Quillota. The plant is hardy enough to bear our climate. Plant twining, flowers green and purple. *Aristolochia*, from *Aristos*, best, and *lochias*, parturition,—medicinal qualities.

5. *Bletia gracilis*, Slender Bletia. Gynandria, Monandria. Orchideææ. A native of Mexico, whence it was introduced by Messrs. LODDIGE's, of Hackney. It has bloomed in the collections of JAMES BATEMAN, Esq., and the Hon. and Rev. WILLIAM HERBERT. Flower stems rise half a yard high. Flowers: sepals yellow, suffused with rose, labellum striped with rose and yellow. It probably requires the treatment of *Bletia verecunda*, acutipetala, and Sheperdi, to all of which it is nearly related; and it ought, when at rest, to be kept where it is in no degree exposed to circumstances that are unfavourable to its growth. Dryness, and a cool place at the back of

a greenhouse, or common pit, protected from cold or wet, would probably suit it until the season returns, at which time it should be removed to a hot damp stove, among tropical epiphytes, to remain there till its leaves decay; when that happens, it should once more be restored to a resting house. *Bletia*, from LOUIS BLET, a Spanish botanist.

6. *Gilia Achilleaefolia*, Milfoil leaved. Pentandria, Monogynia. Polemoniaceæ. A new hardy annual, sent from California to the London Horticultural Society, by Mr. DOUGLAS. It resembles *Gilia capitata* in its foliage, and in the arrangement of its flowers; but its appearance is much more green, and its habit is dwarfish. The flowers, too, are purple, instead of sky blue. It will grow in any kind of garden soil, and produces seed in abundance, so that it will soon become as common as *Gilia capitata*. The present species blooms from July to December. *Gilia*, from GILEO, a Spanish botanist.

7. *Linaria Dalmatica*, Dalmatian Toad flax. Didynamia, Angiospermia. Scrophularinæ. Synonym. *Linaria grandiflora*. *Antirrhinum Dalmaticum*. Seeds of this very handsome plant were gathered in Persia, and presented by Sir HENRY WILCOCK to the London Horticultural Society, in whose garden a plant or two flowered about Midsummer last year. The shoots spring with very few branches, straight from the ground, and rise to the height of two or three feet. The flowers are large, of a deep yellow, and very showy. It has not produced seeds, but it is a hardy perennial; it may probably be increased without difficulty, by dividing the crown of its roots. *Linaria*, from LINUM, flax,—similar leaves.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.
Librarian to the Linnæan Society. Coloured 3s.; plain,
2s. 3d.

1. *Rhododendrum campanulatum*, Bell-flowered. A small evergreen tree of from three to five feet high. This splendid species is a native of Gosaings-than, a high mountain to the north of the valley of Nepal, and was introduced into the gardens about ten years ago, from seeds sent by Dr. WALLICH. The flowers are of a milk white, shaded with lilac, and surpass in size all others of the genus, with the exception of one discovered in Java, by Dr. HORSFIELD. The present species is truly arborescent. It is cultivated by Mr. KNIGHT of Chelsea. *Rhododendron*, from *Rhodo* a rose, and *dendron*, a tree.

2. *Lobelia polyphylla* Leafy Lobellia. Pentandria, Monogynia. Campanulaceæ. Introduced about four years ago, from seeds communicated by Mr. BRIDGES, and more recently by Mr. CUMING. It is frequent on the hills about Valparaiso, in Chili. This, together with *mucronata* and *Tupa*, from the same country, are very nearly allied, being found to differ chiefly in the proportionate length of the tube of the corolla, the degree of development of the bractæas, and in the presence or absence of downiness on the stem and leaves. The one now under consideration, has the largest bractæas, the shortest tube to the corolla, and is almost wholly glabrous. It thrives best in a light rich soil, and is increased by division, or by seeds. *Lobelia*, from M. LOBEL, a botanical author.

3. *Nierembergia filiaculia*, Twiggy Nierembergia. Pentandria. Monogynia. Solanæ. A native of Entre Rios, a province of the Republic of Buenos Ayres, and was raised in 1832, from seeds sent by Mr. TWEEDIE, to our friend Mr. NEILL, in whose collection at Canon Mills, near Edinburgh, it flowered to great perfection in the early part of last autumn in the open border. It is taller and more glabrous than *N. gracilis*, with the limb of the corolla about double the size of that species, and the tube rarely exceeding the calix in length. The filaments in both are glandular, and in other respects, the plants are nearly similar. *Nierembergia*, from J. E. NIEREMBERG, a Spanish Jesuit.

4. *Calceolaria purpurea*; var. *picta*, Painted Slipperwort, Diandria, Monogynia. Scrophularinæ. An accidental variety of *C. purpurea*, first raised, as we have been informed, by Mr. WHEELER, nurseryman at Gloucester. It differs from *purpurea* in nothing but colour, and the greener hue of the whole herbage. Its copious delicate white blossoms, marked with a broad purple band, render it an agreeable addition to the already numerous cultivated varieties of this genus. The plant requires a light rich soil, and can only be increased by division. *Calceolaria*, see page 19.

The Botanic Garden. Edited by Mr. MAUD, F. L. S. Price 1s. 6d. large; 1s. small, coloured,

1. *Erigeron asteroides*, Aster-like Erigeron. Syngenesia, superflua. Compositæ. This plant grows one foot high, and flowers abundantly from August to October; the flowers are of a lilac purple colour, the plant is perennial, increased by division of the roots. *Erigeron*, from *Er.* spring or early; and *geron*, an old man; the allusion is to its bearing the appearance of hoary age, in spring.

2. *Cineraria maritima*, Sea Ragwort, Syngenesia, Superflua. Compositæ. Its almost white stems and foliage are very conspicuous in the open garden, and it becomes a showy plant, independently of its flowers. The flowers are yellow, and bloom from July to September. It is a moderately hardy plant, cuttings root readily. The plant blooms best in poor soil. *Cineraria*, from *cineres* ashes, to indicate the ash-like colour of the leaves and stem.

3. *Galega Persica*, Monadelphica, Decandria. Leguminosæ. This species is an abundant flowering plant, growing four feet high, producing one of its white racemes at the axil of each leaf. It blooms from June to September. Introduced into this country in 1816. *Galega*, from *gala*, milk; to mark the plant as producing it in animals which feed on its herbage.

4. *Iris Ruthenica*. Russian Iris, grows one foot high. Flowers dark purple and white; blooms from July to September. *Iris* is the Greek name of the heavenly bow.

The Number for May (omitted in our last) contains—

1. *Cistus acutifolius* Acute-leaved, Polyandria, Monogynia Cistinæ. It is a spreading dwarf shrub, not exceeding two feet in height, although its slender branches, unpruned will extend three feet wide. The plant bears a succession of flowers through the whole summer; they are white, the plant is very hardy. Increased freely by seeds, layers, and cuttings from the young shoots. *Cistus*, from *Kise*, a box, in allusion to the seed vessel.

2. *Trachemene cœrulea*, Blue flowered. Pentandria Dignia. Umbelliferæ. It may not, on casual inspection of this new and interesting annual be observed in our natural plants. The present plant is annual, grows eighteen inches high, and flowers from June to October. It requires to be sown early on a hot bed, and be transplanted into the open ground. It was introduced into this country in 1827, and is a very pretty addition to the flower garden annuals. *Trachymene*, from *Trachys* rough; and *mene*, a membrane, in allusion to the coat of the seeds.

Pœonia edulis, Rose scented. Polyandria, Digynia, Ranunculacæ. The sweet scented Pœony was introduced into this country from China, by Sir JOSEPH BANKS in 1805, but this is believed to be the second introduction to England. The flowers are a rosy crimson, coming out in June. The plant is readily increased by dividing the roots in Autumn. Pœon, after whom the genus is named, was one of those personages known only by the fables of the ancients.

Cytisus argenteus, Silver leaved. Monadelphica, Decandria. Leguminosæ. The *Cytisus argenteus* in its natural mode of growth is a low spreading shrub. The flowers are yellow, blooming in July and August. This

kind is sometimes grafted on single stems of the Laburnum, from four to six feet high, and by forming pendulant heads of drooping branches has a very showy and pleasing effect. Most of the other species *Cytisuses* are treated in the same way, and when interspersed among standard Roses, produce a picturesque and striking appearance. *Cytisus*, is derived from *Cythmus*, an island now called *Thermis*, where, according to PLINY, the plant was indigenous

Strictures on disposing Plants in Masses.

The system of disposing plants in masses, so frequently and ably advocated in this Magazine, is becoming very general, and certainly produces a much better effect than the tedious monotony of an indiscriminate mixture. In the practice, however, of this superior method, it should be remembered that the groups and masses ought to be considered as parts of the whole, and as such, should harmonise and unite with each other, with regard to form and colour. Without attention to this point, the several disunited and independent parts will no more form a gardenesque landscape, than the colours arranged on the painter's palette will of themselves form a picture. I have known more than one small garden spoiled by a disregard of proportion, the shrubs and flowers being disposed in groups of far too large a size. In such a situation, a single plant, or a group of two or three, must be considered to bear the same proportion to the whole, as much larger masses or groups bear in the case of a park. Although I approve, as I have said above, of the principle of placing different species in groups and masses, I think that there are cases in which, like all other principles, it may be carried too far. In a small flower garden, which I very much admire, I have seen a group, composed of myrtles and China roses, planted alternately in quincunx order, the larger plants being in the centre; and in my opinion, a better effect was produced than if the two species had been in separate masses; the rich green colour of the myrtles' leaves, forming a ground to the beautiful white of the mingled colour, and the associations connected with both, made an impression upon me which I shall not easily forget. In the same garden there is a group consisting of an acacia, the broader and more shadowy plumes of the sumach, and the pendulous clusters of flowers of the laburnum, composing a little picture of the most highly finished character.

Gardeners might find much instruction for an examination of cottage gardens, in many of which I have seen a degree of good taste that is not always found where there is more reason to expect it. In such gardens, it often happens that very striking effects are produced by a judicious disposition of plants of the most common description, and I think it would be a very useful study to endeavour to imitate them with plants of more rare and choice species. I was once much struck by a particular effect, (not, however, of sufficient general interest for a place in your Magazine,) produced by a plant of the common hop; and it was not until after many trials that I could find a substitute for it among more choice plants, at last, however, I succeeded to my own satisfaction by means of one of the genus *Clematis*; the species I do not with certainty know.

In small gardens, nothing can be more displeasing than a want of neatness and high finish; it reminds me of a flower-painter of the last century who used the most dingy and sombre colours that he could find, saying that he imitated Raphael, and painted for posterity. In the case of a small garden, it should be remembered that, whatever may be the beauty of the design, constant attention, and the frequent removal of plants are indispensable; three or four years of neglect would leave nothing, either to posterity or the designer himself, but a tangled and matted thicket of such plants as might come off conquerors in the struggle for life, incident to want of sufficient space.—*Gardener's Magazine*,

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES,

ON FLORIST FLOWERS, &c.—I beg to call thy attention, and to solicit at the end of the season of each particular florist flower, the continuance of a list of prize flowers, such as appeared in the 3d Number, page 63, and also a list of greenhouse and frame plants, as at page 38; these I consider valuable, as they very much facilitate our purchase and arrangements. These suggestions I think need not be published, but I send thee a query and observation on the other side, which I shall be obliged by thy inserting in an early Number.

I have not yet seen the plants of Greenhouses, Flower Gardens, &c. or the List of new and handsome plants, promised in the prospectus. Wishing every success to the Cabinet

N. S. C.

Truro 4th May 1834.

[The wishes of our respected Friend shall be complied with at an early opportunity. We beg to inform him that we publish a supplement, as he suggests, containing the accounts of Horticultural and Botanical Meetings, and as far as possible, we confine it to the plan instructed—CONDUCTOR.]

ON RAISING CARNATIONS FROM SHED.—If any of your correspondents (perhaps Mr. Tyso) would favour your readers with an article on impregnating and raising Carnations, similar to one on the Ranunculus in this month's Magazine, it would render a considerable service to the growers of that flower.

A. B. C.

May 9th, 1834.

ON THE SIZES OF POTS.—As the conductor has given us a standard relative to the size of pots, it is much to be wished in order to our understanding each other, that the standard given should be consulted. St. Patrick, in Vol. I. p. 57, talks of growing a Balsam (in a 5in. pot 5ft. high, and 10ft. in circumference !!!)

Query—Does Innovator, when he speaks of flowering his Carnations in pots 16 to the cast, mean pots of 6 inches diameter, according to the standard in the Floricultural Cabinet, Vol. II. p. 44? and if so, how does he manage to support a plant 4ft. in length, and what method does he practice in the layering?

CORRUBIN.

ON PROPAGATING FUCHSIA COCCINEA.—I shall be much obliged if you or any of your correspondents will inform me the best manner of propagating Fuchsia coccinea. I have tried striking it under a glass, but have not succeeded, as with F. virgata, comica, globosa, &c. Also, can you inform me if these elegant plants will strike in sand, without any soil? if so, will the common silver sand do?

An early answer to these questions (the first I have troubled you with), as also the last time for striking Fuchsias, will very much oblige,

May, 22, 1834.

AUGUSTUS LEWIS.

ON SOWING STOCK AND GERMAN ASTER SEED.—HEARTSEASE would feel thankful for an answer to the following questions through the Floricultural Cabinet:

When is the proper time for sowing Stock seed, and what is the best method of preserving the young plant from the fly?

Will the German Aster seed grow in the open ground, or must it be sown in a hotbed?

Devizes, May 3, 1834.

ON THE CULTURE OF THE CARNATION.—We shall be much obliged by Mr. REVELL's promised article on the Carnation, and also the promised continuation of the article by Mr. J. PRIEST on Soils; perhaps, if you have received them, you will insert them in your next valuable Magazine.

March 1st, 1834.

S. & T. C.

ON RAISING CARNATIONS, &c. FROM SEED.—Will you, or any of your correspondents, inform me what is the best method of rearing Carnations and Tulips from seeds? Also, when is the best time of the year for planting *Coronilla iberica*?

W. E. F.

P.S.—I have got a very fine collection of Botanical Plants, among which are some very scarce ones, of which I shall feel great pleasure in forwarding you some. [We should be very grateful for the favour.—COND.]

ON DAVEY'S CHAMPION, AND A DOUBLE YELLOW AURICULA.—I have lately bought an Auricula called "Davey's Champion," and will you be kind enough to inform me through your excellent Magazine, whether you think the seed worth saving, and whether it is considered a good flower? The colour of it is black with a white edge. Would you also give me a little information on raising Auriculas from seed. I have also a large sweet-scented double yellow Auricula: will you inform me whether it bears any particular name?

A SUBSCRIBER.

May, 10th, 1834.

ON THE PELARGONIUM AND THE OLEANDER, OR ROSE BAY.—I should be much obliged if you, or any of your numerous correspondents, would favour me with the best method of impregnating the seed of the Pelargonium to obtain new varieties, and also the most suitable time?

GERMANICUS.

Brighton, May 12, 1834.

P.S.—Does the Oleander, or Rose Bay, require a pan placed under it filled with water, and will it flower well in a room?

ON RAISING CARNATIONS AND PINKS FROM SEEDS, &c.—Some of the readers of your very useful and practical Magazine have derived a great deal of useful information as to the culture of the Pink and Carnation, from the communications of Mr. REVELL and INNOVATOR. There is one point, however, on which some information would be acceptable—on the mixing of Carnation beds. I have just brought over a packet of foreign Carnation seeds and should be glad of any hints as to the mode of mixing the soil of the bed, and their treatment up to the time of potting.

London, March 31.

A WELL WISHER & CONSTANT READER.

ON SOME PRIZE AURICULAS.—I observe that Mr. GLENNY's Auriculas took the first prize yesterday (April 16), at the Crown and Anchor, Strand, and that Mr. WILLMER, of Sunbury, was one of the Judges. Now as I happened to know that the same Mr. WILLMER did actually dress Mr. Glenny's flowers, I will ask you if you think this a fair way of proceeding, and if it is usual to send a man in as judge, who previously had the preparing of the show belonging to his patron and customer? Perhaps you will give your opinion

J. C., A SUBSCRIBER.

Camberwell, April 17, 1834.

[There can be but one opinion on the subject.—CON.]

ON DESTROYING THE GREEN-FLY, &c.—Will you or any of your correspondents, inform me the best manner to destroy the green-fly, with which every plant in my garden (in the suburbs of London) is covered. I have tried tobacco water, which I do not find succeed. Will smoking them with a tobacco pipe cure them effectually, or only for a short time? Are hardy annuals, or perennial plants, preferable for growing on a border of my garden, which only has the sun till about ten o'clock in the morning? It is always more damp and cold than the opposite one, on which the sun shines till about five in summer, and is always the most covered with weeds. Also, which is the best time of the year for transplanting *Chrysanthemums* for flowering well the next winter? By answering these questions you will very much oblige.

WILLIAM FREDERICK.

June 5th, 1834.

ON FUCHSIAS.—You would very much oblige an ardent amateur and subscriber to your Cabinet, if you would give a list of the Fuchsias known and cultivated in this country, in your July Number. The favour would be much enhanced by your adding the modes required for their propagation, and the places where they are to be procured. Do nurserymen object to sell cuttings of Fuchsias and other plants? CONVULVULUS MAJOR.

King's Road, Chelsea, June 11th, 1834.

[An Article will be given next month on the Fuchsia, &c. The request came to hand too late for the present Number.—COND.]

ON GREENHOUSE PLANTS, &c.—I am exceedingly pleased with your publication, and only hope you will meet with that encouragement from every lover of flowers which you so richly deserve. The plan by which you review the periodicals particularly pleases me. There is, however, one work on florist flowers by ROBERT SWEET which you have never noticed: I fear therefore, the publication of it has been discontinued. (It has.—COND.) Your lists, also, of choice flowers were very valuable, particularly so to subscribers, who like myself live at great distance from London, and have no chance of seeing new flowers in bloom. You must give us a few more such selections in the second volume of your work; and as my garden (like many of your friends in this neighbourhood) is small, a cross or star to denote the finest of the fine would be very desirable. I should be glad, for instance, if some experienced person would give a list of twelve of the best hardy Ericas; twelve of the best greenhouse Ericas; twelve or more choice herbaceous plants that might be easily procured; and, above all, a collection of hardy greenhouse plants that would flower successively the whole year. Mine is a very small greenhouse, only fifteen feet long by nine feet wide; and as I am about to remove it soon, I wish to know whether a high or low greenhouse is the best for plants, and whether I must exclude vines entirely if I wish to excel in flowers. I am very much surprised that some of the London nurserymen do not give catalogues of their plants in your publication—not like Young's Calceolarias, without prices affixed; but similar to the Dahlia catalogues, so many of which you have advertised. I am well persuaded they would find it answer, and that they would considerably increase the sale of their plants. *

Bodmin, May 2, 1834.

ANSWERS.

ON EPACRIS GRANDIFLORA, &c.—In reading over the March Number of the Floricultural Cabinet for 1834, I see, under the head "Queries," a correspondent wishes for information on the following genus of plants; if my mite of knowledge will be of any service to him, or any one similarly situated, and you consider it worth occupying a space in your amusing Magazine, you are at liberty to publish it in any shape you please.

Epacris grandiflora, propagation of, from January to March.—1st. Take a clean 48-sized pot, put a large cork in the bottom, then add a quantity of small crocks, or coarse cinders, until the pot is half full; upon this put a layer of moss beat down firm, fill up with fine sifted peat mould, and white silver sand; an equal quantity mixed together, pressing it down firm to within a quarter of an inch of the rim of the pot; fill up with clean sifted silver sand, passing a stick over the pot to make the surface level; give a slight watering with a fine rose pot or syringe; take a bell glass, press it lightly on the sand so as to leave the circumference; then select your cuttings from last year's ripened wood, cut the tops of the shoots about one inch long, strip the cutting half its length of leaves, lay it on your thumb nail, with a sharp knife, cut the base at a joint quite smooth, and when a sufficient quantity to fill the pot is prepared, insert the cuttings as far as stripped, keeping the tallest, if any, in the centre; give a good watering to settle the sand about them; let them stand until dry; cover with the bell glass, and plunge the pot in a cold frame facing north; keep the light on, protecting from frost with covering, or, for want of a frame, place the pot on a north shelf in the greenhouse, but by no means in the sun; wipe the glass once a day; water

according to judgment, keeping them rather dry than moist. When the cuttings begin to grow, take the glass off occasionally half an hour, and increase with air as the cuttings increase in growth, until it may be left off altogether; then remove them to the greenhouse, pot them off the following March into thumb pots, well drained, using peat mould and sand in equal quantities; place them in a cold frame until rooted; during summer, top any long shoot, and by the autumn you will have snug bushy plants, producing in spring beautiful pendant blossoms.

Corræa speciosa, propagation of—May be increased by cuttings potted early in February or March, but the quickest method is by inarching upon *Corræa alba*, any time from February to July, and if the plants can have the advantage of a stove heat, the better, as the inarched shoot will have united in the course of eight or ten weeks; it may then be cut off, care being taken not to disturb the shoot inarched, but by no means head off the stock at present; place them in a cold frame, keep them close and shade for a fortnight; expose them to the air by degrees, and when the inarched shoot has recovered begins to grow again, then head off the stock; loosen the ligature that was bound round the plant, otherwise it will cut; bind a fresh piece of bass loosely round the plant at the union, tie the plant up to a neat stick in case of accident, remove the plants to an airy part of the greenhouse, attend to water, and in the spring you will have a bushy plant covered with handsome blossoms. I have not mentioned the mode of inarching, thinking it not necessary; as almost all persons having any knowledge of plants must know the process.

Oenothera may be propagated three different ways.—1st. All the perennial species may either be divided at the root, or—2ndly. Pieces of the strong roots cut one or two inches long, planted round a pot, will form eyes and make plants; some species may be layered, such as *missouriensis*, *taraxacifolia*, *macrocarpo*, &c.—3rdly. the biennials and annual species may be raised from seeds.

J. MILES can purchase any quantity of double white *Anemone*, if he means *Anemone nemorosa plena alba*, and *Trilium sessile*, by applying to Mr. JOHN GREE, Nurseryman, Addlestone, near Chertsey, Surrey.

If this should meet with your approbation, and no other abler hand should take up the pen, I will give MYRTLELLA, through the medium of your Cabinet, a little instruction as far as I know, how to flower Myrtles in abundance, likewise a few hints on the culture of *Agapanthus umbellatus*. Wishing every success to the Floricultural Cabinet, &c. J. W. D.

Great Bookham, Surrey, April, 13, 1834.

ON THE CULTURE OF THE MYRTLE.—I am happy to state, that after patience and perseverance I have succeeded in getting all the Numbers of the Floricultural Cabinet, and am glad to hear it greatly commended by all my senior professors of Floriculture who have seen it, and I have no doubt but that it will have a much greater circulation in this part of the country if you have more in print. I was obliged to wait till the third edition, which shews the rapid progress it is making, and I hope you will continue your editions for the benefit of my fellow Floriculturists, as many more wish to possess it, and all agree that it is the most useful and cheap publication now printed; it affords me great amusement and knowledge. I beg to inform MYRTLELLA that I have a plant of Myrtle planted in common garden loam at the bottom of a south wall, not trained, which has stood the winter for years past, sometimes matted and sometimes not; but never flowers well if it is not matted up in the winter; it has been broken by accident once, but it is now about three feet high, five or six in circumference, and last year had hundreds of blossoms; cuttings put in a pot in autumn and kept in a greenhouse during winter, grow well in the spring. As to *Heliotropes*, I take off cuttings in autumn, and afterwards keep them in the greenhouse or cold pit during winter, and plant them in beds in summer, where they produce their fragrant blossoms in abundance. YOUNG FLORA.

[We have had, for the last four months, a constant supply with our Publishers of all the Numbers published of the Cabinet. If our friends do not receive the Numbers on application, we think the fault will be found to rest with the Bookseller.—COND.]

ON THE CULTURE OF AGAPANTHUS UMBELLATUS.—A Subscriber wishes to know the best method of keeping and treating the *Agapanthus umbellatus*. Being advised by a professional man to plant them in water, which he considered their natural element, I tried it, but it did not answer my expectations. I have several plants which flower when planted in large pots in garden mould, which have little attention, but well supplied with water in summer, and placed in a cold frame in winter; they also flower planted in a south border, and during winter a hand glass placed over them: but the most successful mode of culture is what I desire to know.

Waltham Cross, Herts.

YOUNG FLORA.

ON THE SPINDLING OF THE CARNATION.—The sulphate of lime used, is the stone from which plaster of Paris is made by calcination; it is by no means so difficult to powder as *IGNORAMUS* imagines; a boy with a broad faced hammer would powder a barrowful in a day to the consistence of coarse sand, which is fine enough. It may be bought of all respectable plasterers, and shipmasters trading to France or Arabia. C. N. is informed that the practice I adopt with such Carnations as spindle up in winter, is to break off the flower stem about a fortnight before planting them to flower. The grass then upon the plant will immediately begin to grow. When they have made three or four joints, cut them all off but one (the strongest) between the third and fourth joint; these stumps will throw out plenty of grass for layering; the one left entire may be trained up to flower. I am seldom troubled with this complaint, except in fresh bought flowers, which I attribute to my plan of layering, viz. I divide my flowers into three classes, early, middle, and late flowering: the latter such as Spitfire, I layer in the middle of this month—the middle class in July—and the early, the second week in August; by pursuing this plan, my flowers are all in bloom at the same time. When layers are removed from the old plant, be careful to cut them to a level with the nib from which they have struck root; and after they have been potted a fortnight, they will have struck from this part also which renders them in no way inferior to pipings. Two-year-old *Auriculas* are best grown in 24's; and I should consider 12's large enough for any plant. C. N. keeps his compost properly.

INNOVATOR.

June 6th.

REMARKS.

ON GLADIOLUS PSITTACINUS.—I procured last spring three roots of the *Gladiolus psittacina*, each the size of a large nutmeg; these I planted in the open border, in a compost of leaf mould and rotten dung. Only one of the bulbs produced a flower, which was a very superb one indeed, having twelve blossoms on one stalk; a more beautiful *Gladiolus* I never beheld.

I dug up the roots in the fall, and instead of the three roots which I planted in the spring, I found five, two of the original roots having divided; each of these roots was as large as a middling sized onion; but I was surprised by finding what I considered an extraordinary number of bulbs adhering to the roots, eight of them the size a hazel nut, as many more as large as a pea, and above six hundred the size of grains of wheat.

I do not know whether there is any thing very extraordinary in this result, though I cannot but anticipate, that in a very few years this magnificent plant (roots of which three or four years ago were selling at 7s. each) will, from its abundant increase, become the ornament of every cottage garden.

T. W.

May 20th, 1834.

ON BUDDING THE WILD ROSES GROWING IN HEDGES.—Last year I budded a number of the garden variety of Roses, upon the wild ones growing in my hedge rows. I selected different shades of colour in the kinds, and such as are highly fragrant. They are now in blooming, and to view the variety of shades in colour, and to inhale the delightful odoriferous scent they impart, is most gratifying. I suggest to the numerous readers of the

Cabinet an attention to this mode of cultivating the various kinds of Roses, assured, if practised, it will afford much pleasing gratification, and increase the beauties of Flora.

M. SAUL.

Lancaster, June, 7th.

REFERENCES TO PLATES.

1. *Burnard's Formosa Polyanthus*.—A seedling raised in the garden of J. P. BURNARD, Esq., Formosa Cottage, Holloway, near London. An Article upon Polyanthus will appear soon, when this variety will be further noticed.

2. *Ipomœa Horsfalliæ*, Mrs. HORSFALL's Ipomœa. Pentandria, Monogynia. Convolvulacæ. Seeds of this very beautiful tender evergreen were received by CHARLES HORSFALL, Esq., either from the East Indies or Africa, and raised by Mr. EVANS, the gardener at Everton. He has it under the name of *I. pentaphylla* of CAVANILLES (*I. Cavanillesii*, Roem. et Schultes) which is still more at variance with our species. *I. Horsfalliæ*, in its inflorescence and blossoms, bears the closest affinity with *I. Paniculata*, Br. (*Convolvulus*, L.); but their foliage is so different, that the two plants never can be confounded—the former having compound and quinate leaves, while those of the latter are simply lobed. The flowers appear to fall off without bearing seed, probably owing to the season of the year (December and January) at which they are produced.

3. *Salvia dotichostachya*.—(See page 101 of the present Volume.)

4. *Eschscholtzia crocea*, Saffron-coloured Eschscholtzia. Polyandria, Tetragynia. Papaveracem. In general habit, foliage, and size of the flower, this new species of Eschscholtzia closely resembles *E. Californica*, introduced by Mr. DOUGLAS on his expedition, and now so generally admitted to be one of the most beautiful additions to our hardy ornamental plants. The present species, however, promises fair to surpass even that in the rich orange colour of the petals. It appears to be equally hardy, and, judging from the experience of a season, to flower still more freely. It is chiefly distinguished botanically from *E. Californica* by the widely expanded limb of the curious appendage of the peduncle beneath the insertion of the calyx, which is characteristic of the genus, and by the long attenuated point of the calyx (Hort. Trans.) Like *E. Californica*, this is a perennial; but in consequence of its bleeding copiously when wounded, it is not likely to bear propagation in any other way than by seed. It has not hitherto produced any seed. The two plants in the garden of the Horticultural Society are all that at present exist in Europe.

5. *Calceolaria arachnoidea*, VAR. *refulgens*: Refulgent Slipperwort. Dianthia, Monogynia. Scrophularinæ. This showy production was raised by Mr. GILLEN, gardener to Mr. M'Intosh, at the East India Docks, by cross-impregnation with two of the numerous varieties, originated between *C. arachnoidea* and *corymbosa*. A light rich earth suits these plants best; and the particular varieties can only be increased by slips from the original stock.

6 *Echites stellaris* Star-flowered Echites. Pentandria, Monogynia. Apocynæ. A tender stove climber, introduced from Rio Janeiro to the Horticultural Society by the Hon. ROBERT GORDEN. In the month of August, its flowers perfume that part of the hot house where it is placed with a delightful smell of Primroses. Although this is probably not of uncommon occurrence in Brazil, it appears to have been hitherto undescribed; the obscure *E. pubescens* of WILLDENOW, to whose character it nearly approaches having heart-shaped leaves. It grows readily in peat and loam, but is scarcely to be propagated except by cuttings of the root.

7. *Royal Sovereign Tulip*.—Our drawing of this very beautiful and valuable Bizarre was taken from a bloom which obtained the premier prize at the Stockport exhibition of the last year, and was grown by the Rev. M. GILPIN, of that town. From the striking resemblance it bears to Strong's

Charles X. and Page's George IV., it has been considered by many connoisseurs to be the same flower. This, however, is a mistake: for it broke into colour on Mr. PEARSON'S bed several years previous to the introduction of those two Tulips; and, from its deep broad freaked, good yellow, and, above all, its not being inclined to sport, is decidedly a superior flower, and is held in the highest estimation by the Nottinghamshire and Lancashire florists.

FLORICULTURAL CALENDAR FOR JULY.

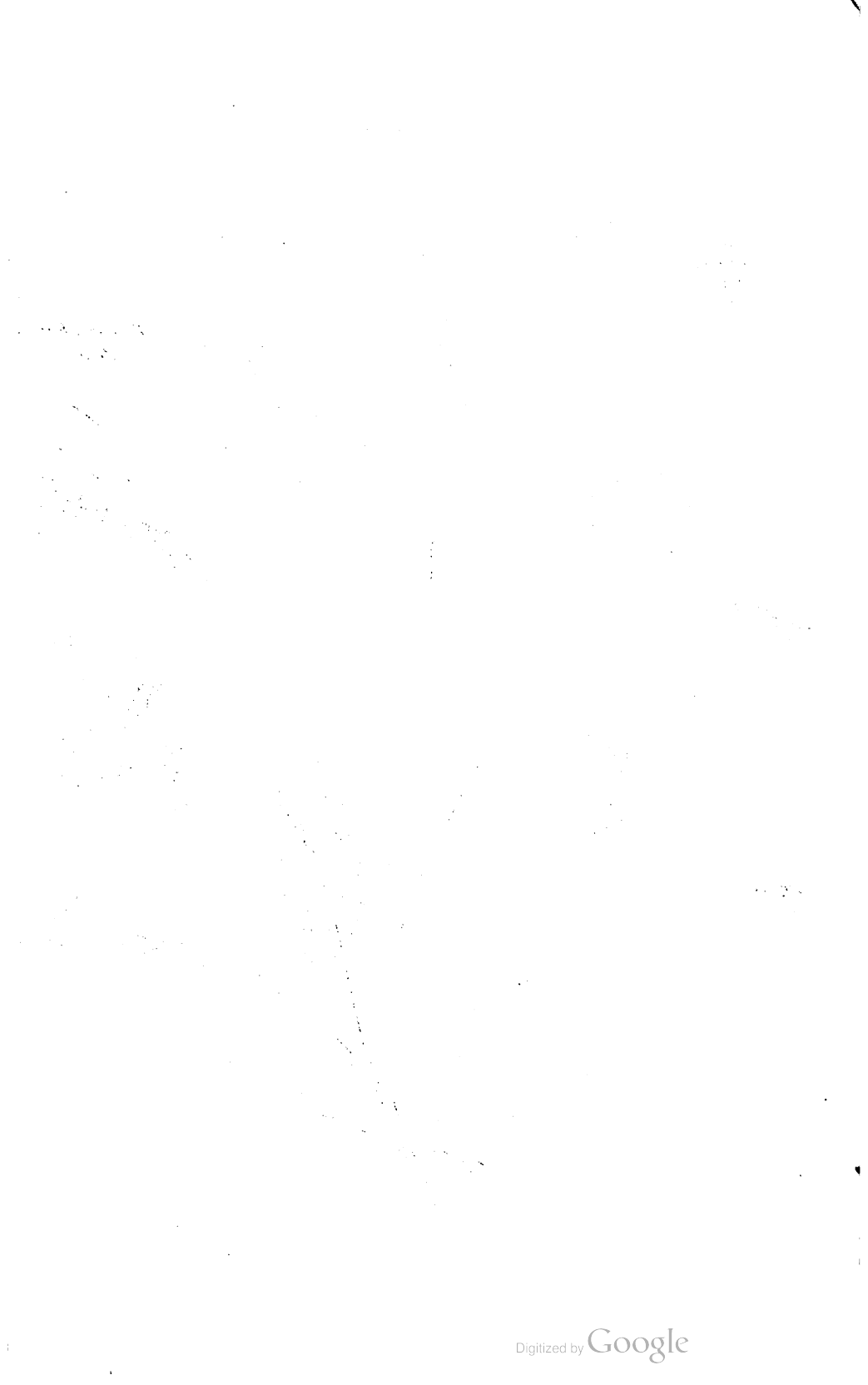
STOVE PLANTS.—Similar care is required this month as given for the two previous months, taking care to give large portions of fresh air daily, with frequent waterings, steaming at night, cleaning propagating, &c.

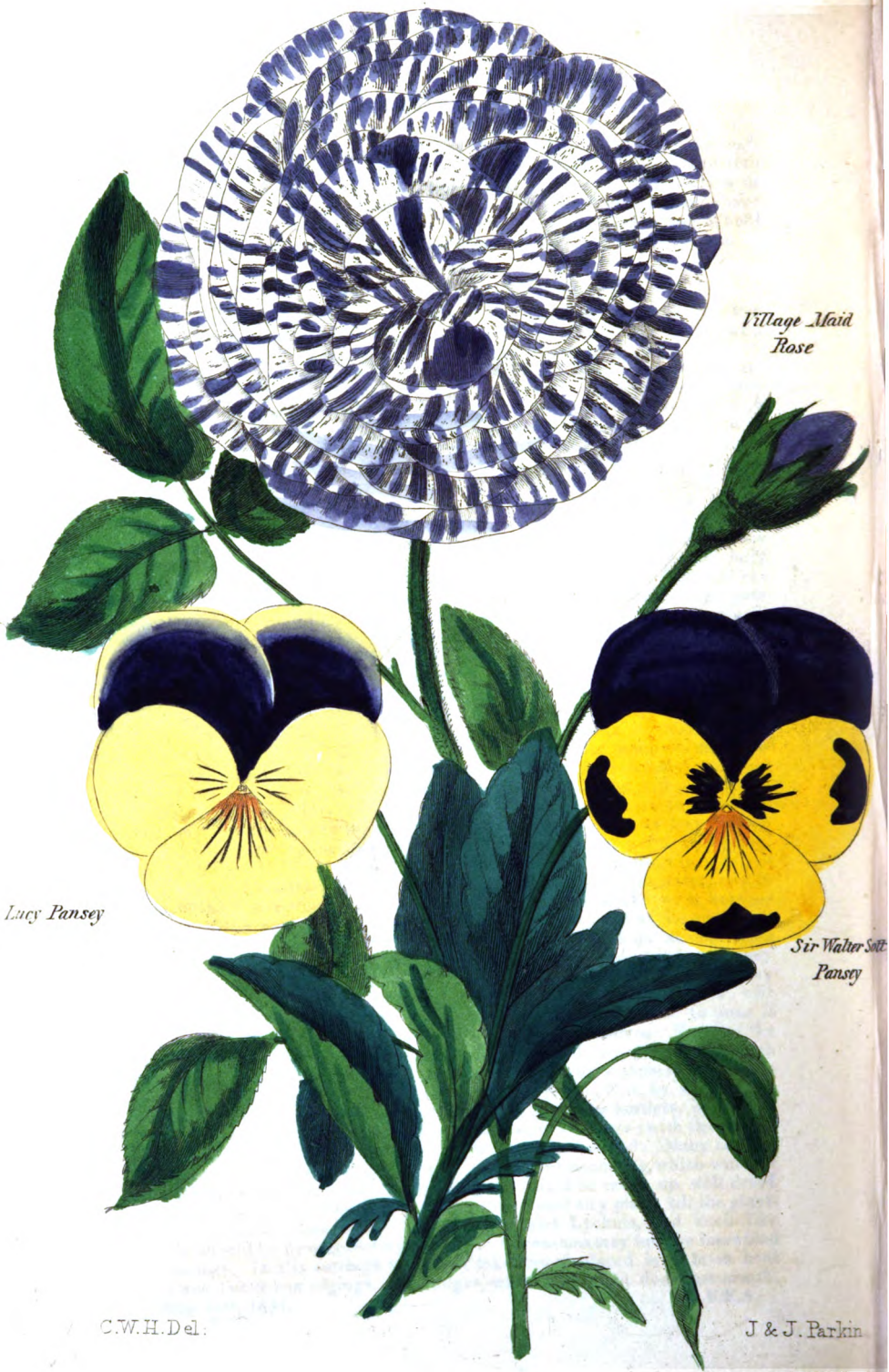
GREENHOUSE PLANTS.—Oranges, Lemons, &c. will require particular attention in dry weather, in order to supply them with water whenever they require it: those pots or tubs that have not lately been top-dressed with fresh earth, should now be done, by removing the old soil to the depth of three or four inches, and replacing it with new; it will be of great service in forwarding the growth of the new set fruit, and also greatly invigorate the plants. About the middle or latter end of the month, begin to bud them upon stocks raised from the kernels of their fruit, that was sown in the spring of three years preceding; those plants that have too great a crop of fruit upon them, should now be attentively thinned. In dry weather, the plants belonging to this department in general should be duly and daily supplied with water, as the earth in the pots will now dry very fast, and require often to be moistened. Those plants that may now require larger pots may still be removed into such, using proper compost. All the plants should be kept clear from decayed leaves, &c., and the surface of the pots from weeds, loose litter, &c. &c. Still continue to propagate by cuttings or otherwise, any required kind of plants, as before directed.

PLEASURE GROUND, FLOWER GARDEN, &c.—Those annual plants that have not yet been transplanted out, should now be done, in cloudy and showery weather, keeping as much earth to their roots as possible, and supporting those with sticks that require it. Tender annuals may now be turned out into the flower borders; they should be refreshed at least once a day with water, and if the sun is very powerful they will require to be shaded, till they have taken fresh root: those that remain to flower in pots, must be frequently supplied with water, repotting &c., as they require it. Finish transplanting perennial and biennial plants, sown in spring. Double Sweet Williams should now be laid. Those carnations in pots require particular attention in keeping them well supplied with water, and to support the flower stems by tying them to neat green sticks with bass;—pipings of the young shoots may still be put in; those cut at the second or third joint make the handsomest plants; they should be kept shaded from the hot sun, otherwise they will soon get scorched and dried up; they should be finished layering by the middle of the month. Pinks may still be propagated by pipings as in June. Auricula plants in pots will require a little water frequently in hot weather, taking care not to pour it on the heart of the plant: all dead leaves should be removed; if any of the plants are attacked with the green fly, they should be smoked with tobacco. Transplant seedling Auriculas and Polyantheses, and keep them in a shady place. Pansies may still be propagated by slips of the young shoots; the seed should be sown either in pots or borders, in a shady place, and well supplied with moisture. All sorts of Roses (with the exception of the China and its varieties,) should now be budded. Many sorts of bulbous rooted plants, as Ranunculuses, Tulips, Anemones, &c, which will now be past flowering, and their leaves decayed, should be taken up, well dried cleaned, and the offsets separated, and put in a cool airy place, till the planting season again commences. The double scarlet Lychnis, and such like plants, should be propagated by cuttings. Geraniums may now be increased by cuttings. Dahlia cuttings will easily take root if placed in a brisk heat. Continue to cut box edgings, and hedges, where it was not done last month.

May 31st, 1831.

F.F.A.





THE
FLORICULTURAL CABINET,

AUGUST 1ST, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*A Word or two on the Culture of the Auricula.* By SNOWDROP.

It may appear unnecessary to multiply words on the culture and management of the Auricula, after so much has been written on the subject ; but as every *Auricultist* can, perhaps, add a little to the general stock of information from his own experience, and as every one has a plan peculiar to himself, it is desirable to see different modes of treatment. With the hope, therefore, of being useful, I offer a word or two on the subject, premising that as this plant is of Alpine origin, it should, both in soil and situation, be treated as such as much as possible. And first of

Compost.—I believe that in general, except with very *green* growers, the Emmertonian composts are washed away. From experience I can say, that pure sandy loam and rotten dung, in equal proportions well incorporated, are the only ingredients necessary. I prefer cow-dung, though perhaps horse-dung is equally good ; but both must be quite mould before fit for use. I am also partial to peat, in the proportion of about one-eighth of the whole. This compost I never sift, but chop up with a spade, and carefully pick over, to clear it of grubs and worms, leaving the fibres, which tend to lighten the soil, and which, by gradually rotting, continue a supply of nutriment.

Repotting.—I repot every year, reducing the ball very carefully, without injuring the fibres of the plants ; and every third or fourth

VOL. II.

Z

year, as occasion seems to require, wash and trim the roots, and shorten the tap root. This I perform the last week in June, or the first in July, choosing showery weather, if possible, for the purpose, as I like to get the plants well established before winter. As to the autumn bloom, if the pips be picked off as soon as they can be got hold of, I never find the spring bloom injured thereby, though the contrary certainly occurs when the flower has been allowed to bloom. With regard to separating the offsets, without question early in March is the best time, for the old plant being relieved from supporting its progeny, will consequently bloom stronger, and the young plants have then time to gain strength for the next season : but I always rub off those offsets which I do not wish to preserve, when I repot ; if, however, I want rooted offsets from those produced high up on the stem, I plant deeper, or earth up. I top-dress with the above compost the last week in February. After repeated trials, I am certainly unfavourably disposed toward manured water for the Auricula, it certainly having a tendency to rot the plants.

Situation.—This, in my opinion, is one of the most important points, and the most difficult to determine, in the culture of the Auricula ; and more depends upon it than upon almost any thing else. Every grower must be guided by local circumstances. When I first took this plant under my care, I adhered most minutely to EMMERTON's instructions ; and so far as a southern aspect in winter, and a northern one in summer, were concerned, it did very well ; but from March to the end of the blooming season, the only chance I found of doing any good was to move them about until I found out the best spot, most open and free from drafts. Indeed, during this period, I several times change both situation and elevation. Easterly and westerly winds are great evils in small gardens between walls, and from these the Auricula must be protected ; for if once the pips become cupped, it is rarely they can be made to open flat afterwards. I give at all times, except during severe frost, all the air possible. In November, I put them into their winter quarters in frames, and keep them as near the glass as possible, without their actually touching it, allowing them moderate showers, if the weather proves favourable, to the end of the month. During December, January, and until the last week in February, I never allow them a drop of water,

and I find my account in it by getting fine bloom ; for when they are kept in a state of excitement during the winter, the foliage is generally fine in the spring, but the bloom is the reverse. About the last week or ten days of February, if not then frosty, I *set them to work* ; and as I like a quick growth, I water them every day, and let them have besides all the mild, moderate showers that fall, keeping on the lights as soon as the trusses appear, and on frosty nights cover up with two or three mats, and continue to do so during March and as much of April as may be cold. But by letting them have all the air possible, without a draft of wind, I prevent their being drawn up. During the March winds, I screen them with a curtain of mats at a short distance from the frame, and protect them from the sun during the bloom by an awning of white calico ; and if the sun shines very hot, I place a mat over the awning.

SNOWDROP.

ARTICLE II.—*On the Cultivation of Cactus speciosissimus.* By J. B. DENTON, Esq.

Two or three queries have appeared in the *Cabinet*, requiring information on the cultivation of that beautiful plant, *Cactus speciosissimus* ; in answer to which I beg to forward the following, for the information of “ C. C. C. C.” and “ An Amateur,” as my mode of treatment, and what I think will be found the “ proper culture of it as a greenhouse plant.”

Three years ago, having *two* strong, good-sized plants, that had always stood upon a shelf in the greenhouse during the winter, and were placed in the open air for the summer months, but had never shown blossom, I resolved to try the experiment on one of them, of reducing the shoots, which were then 18 inches long, to the length of a foot ; and these ends, after being left to dry, were struck with my Geranium cuttings, which I was just then disjoining from the plants receiving their spring pruning. It was afterwards taken from the house, and plunged in the border up to the rim of the pot, to remain till the end of August ; when it was repotted in fresh loam and lime rubbish, and carried back to its former place. I gave it no water till it showed bud in the latter end of March, from which time, as the season and blossoms ad-

vanced, the water it received was gradually increased. It ultimately produced eight beautiful flowers.—By similarly treating it last year, this plant now promises, by its appearance, to expand, within the space of a week or ten days, eleven buds, which stand prominently forward; while the fellow plant remains as heretofore, a barren specimen of the species.

These few lines are, I must beg to say, particularly addressed to those who, like myself, are amateur gardeners, and derive a pleasure from the occupation, equally salutary to the mind as the body,—and not to professors of the art, who may, by their closely wrapt and well preserved knowledge, deem the foregoing words an “essay of ignorance.”

I sincerely thank Messrs. ASHFORD and APPLEBY, for so kindly elucidating the points I requested, and you for so ably conducting a work so congenial to my taste.

J. BAILEY DENTON.

Barkway, Herts, May 16th, 1834.

ARTICLE III. — *On the Cultivation of Campanula pyramidalis.* By Mr. LADDY, Walworth.

Seeing an account in your *Cabinet* on the cultivation of *Campanula pyramidalis*, which advises slips to be taken off in the month of April, and having cultivated those plants for several years by a far different method, I thought I would trouble you with a few remarks on the method I pursue. As soon as the plants have done blooming, I immediately turn them out of their pots; the root I then break into as many pieces as I want plants; I then put five or six of the pieces into a 48-sized pot, which I about half fill with mould, then put in the pieces, and afterwards fill the pot with the mould. If I have the convenience of a frame or hand-light, after watering, I place it over them. In the spring, (about March,) I pot them singly, and so let them remain during the summer in any cool part of the garden, where they grow vigorously. On the following spring, I pot them into 24-sized pots. When I have the convenience of a light in a frame, or spare room in a greenhouse, I place them there till they have done blooming. Last season I cut a white one up this way, and I now have thirty-six strong.

healthy plants for bloom next summer. I beg to observe, that if some of the largest pieces of the roots are selected, and placed upon any slight heat, they will bloom finely the following spring, the plants making their appearance through the mould in two or three weeks; or they may be increased in the way I have been mentioning, entirely in the open air, and when strong enough for bloom, brought into the apartment of a house. I pot in any common garden soil that is light.

HENRY LADDY.

Walworth, April 14th, 1834.

ARTICLE IV.—*On the Propagation of the Carnation, Picotee, and Pink.* By GULIELMUS.

The simple and convenient method of raising the above-mentioned beautiful flowers from pipings or slips, without the aid of glass, as recorded by your valuable correspondent "Snowdrop," in the *Cabinet* for November 1833, I have practised many times with tolerable success, not losing more than one in twenty, and possess at present a number of fine healthy plants all reared in the same manner. I can, therefore, confidently recommend its adoption to those who are not skilful in piping or laying.

I take off slips from the old plants about the end of July, as long as I can get them, in order to ensure their better rooting; and either put three or four into a large pot, or in the open ground, according to convenience, in a shady situation, taking particular care to close the earth well round them, and to water them frequently in dry weather. They will take a much longer time to establish themselves than by piping or laying, and flag more, and not unfrequently appear as if they were dead, so that an impatient or inexperienced person might be tempted to pull them up; but as soon as they have become firmly rooted, they will erect their heads, and appear healthy and strong.

If you consider these remarks worthy of your notice, as tending in any wise to carry into effect the benevolent designs of your esteemed correspondent, who, I observe, in all his communications endeavours to meet the wishes, and accommodate the means, of the humble florist, they are at your service with much pleasure.

GULIELMUS.

London, 25th February, 1834.

ARTICLE V.—*On the Cultivation of Lobelias in Pots.*

By G. H.

The whole tribe of Lobelias are delightfully interesting, although the greater part of them are plants of humble growth. The species I have cultivated are *L. fulgens*, *L. splendens*, *L. cardinalis*, and *L. siphilitica*. The *L. cardinalis* has long been an esteemed flower in our gardens; the first and second species are of modern introduction; and the last species have long been cultivated in our gardens. The whole tribe are readily propagated either by seeds, suckers, or cuttings; but I prefer raising them from suckers, which I take off from the old plants in the regular way in October. Afterwards they are planted one in each small pot, and put into a cold frame till the end of January, when they are removed into a Melon or Cucumber frame, where the heat is kept up to 65 deg. of Fahrenheit by the aid of hot dung. A Pine stove, of the same temperature, will suit them equally as well as the frame, provided they are not kept too far from the glass, so as to draw them up weak, which would greatly injure them for blooming. Towards the end of February, they are shifted, with their balls as entire as possible, into pots a size larger; and early in April, they are again repotted into larger pots; and towards the end of May, they are shifted a third time;—the pots I use for this last shifting are 12's. As soon as the plants have got well established in the last-mentioned pots, they are removed into a greenhouse, in which they continue till they flower, and are hardy enough to bear the open air. When they are preparing to throw up their flowering stems, and during their growth, they are kept very moist by putting pans under the pots, and keeping them constantly filled with water. If the plants are managed as already detailed, they will begin to flower in July, and the spikes will continue to grow, and will be covered with flowers through the autumn. The compost I use consists of equal parts of yellow loam and of leaf-mould, to which is added sand equal to one-fourth of the previous composition: before used, the whole is well mixed together. Specimens cultivated in the above manner have been exhibited at various Floricultural Meetings, which have had spikes of magnificent flowers four feet in height. When the plants throw up only one spike of flowers, the end is pinched off while young, which will cause

several spikes to issue from the same roots. When stopped, they seldom attain so great a height, but are much more elegant in their appearance, the produce of flowers being considerably more than when only one spike is allowed to remain.

I have adopted various methods in order to excel in blooming this beautiful tribe; but in none have I been so successful as with the method now detailed, which I trust, if inserted, will be of some benefit to the numerous readers of the *Floricultural Cabinet*.
G. H.

Downham Market, Norfolk, Feb. 13th, 1834.

ARTICLE VI.—*On the Cultivation of the Genus Cactus.*

By MR. D. PEARCE.

Being an admirer of that beautiful genus of plants, the Cactus, I now send you a paper on its cultivation, that has just come under my observation, and which, if you think proper, I shall be glad to see inserted in your Magazine.

All the species of Cactus may be treated as follows :—Pot them in loam and peat, or sandy loam, mixed with about a fourth part of lime rubbish. Always let the pots in which they are planted be as small as the plants will allow: large pots are injurious, because the roots are prevented from reaching the sides for so long a time, and the body of soil is liable to retain too much moisture every time the plant is watered. Always give a good drainage, by laying in each pot a good portion of broken potsherds,—as the least stagnation is always injurious, sometimes fatal; therefore, never allow water to stand in the pans or feeders in which the pots are sometimes placed. Water very seldom, not more than twice a week when they are flowering, and not so often at other times; give very little at a time, not more than will just moisten the soil all over, particularly if the weather is not fine and sunny. About the middle of June, turn them out of doors into a situation where they will not be exposed to winds, but perfectly open to the rays of the mid-day sun. Place them on a board or floor of any kind, to prevent the worms from entering through the bottoms of the pots. This system of exposing them in summer gives them a check which seldom fails to produce a good bloom. Whilst out of doors, they must not be allowed to receive the heavy dashing

rains, or they will suffer, perhaps die in consequence; either a boarded roof, or other shelter, must be provided for them on such occasions. Also, if the pots stand on a floor of slates or flag stones, they should be partly plunged in a little moss, as the sun, by heating the pots, sometimes burns the roots of the plants. In September, take the plants into the greenhouse, and place them in a situation where they will receive plenty of light and air during winter. Early in the spring, remove them to the stove in succession, as they are required to bloom. Most of the species will flower very fine, without being placed out of doors at all; but by placing them out as above, the flowers will be much finer, and more abundant, than when grown regularly in the house; they may be increased by cuttings, seeds, and grafting.

By Cuttings.—Take off the cuttings at the length required, and lay them on a shelf in the greenhouse, to dry and heal the wounds. Let them remain on the shelf until they begin to have a shrivelled appearance—say a week or fortnight; then pot them in small pots in the same compost as recommended for the old plants; set them on a shelf as near the glass as convenient, and be particularly cautious not to overwater them.

By Seed.—Sow the seed in the wet state, immediately after being gathered from the plant, and rubbed out of the husk. For this purpose, fill a pot with a mixture of equal parts of peat earth and sand; cover it lightly, and plunge the pots in a hotbed: if the seed be good, it will make its appearance in a month afterwards.

By Grafting.—The operation of grafting is very simple, merely requiring an incision to be made, and fitting in it a fresh cutting of another kind, rubbing a little clay over the wound to keep out the air. The union is soon effected, and the new branch grows freely.

April 14th, 1834.

D. PEARCE.

ARTICLE VII.—*A Description of Twenty-six Species and Varieties of Fuchsias; with Particulars of the Method of Cultivation, &c.* By Mr. W. BARRATT, Nurseryman, Wakefield.

In perusing your truly interesting work, the *Floricultural Cabinet*, I observe amongst your very numerous Correspondents, that

two (if not more) are desirous of obtaining some information respecting the number of kinds, propagation, and subsequent culture of that very desirable, showy, and much admired genus of plants—the Fuchsia. Being an ardent admirer of them, and having in cultivation the following sorts, which have grown very satisfactorily, I am induced to send you the following remarks on the description of each kind, and the mode of treatment I have pursued with them.

1, *lycioides*.—Propagated by cuttings of young wood, inserted in pots, and placed in a hot-bed frame; care must be taken to prevent it going off by damp, as it is rather succulent. It flowers freely when grown in large pots in the open air during summer, but requires the greenhouse protection in winter.

2, *coccinea*.—The old scarlet, so well known, and cultivated so successfully in the open ground, as well as in pots, that it requires no remarks in this place.

3, *virgata*.—A variety of No. 2; it grows with an innumerable number of twigs, which in summer are filled with a vast profusion of flowers; the flowers are rather larger than those of No. 2.

4, *gracilis*.—A slender twigged kind, grows very tall; the flowers are large and hang very pendant. This kind flourishes well either in large pots or the open ground, but requires a rich soil.

5, *gracilis erecta*.—A fine, upright, growing kind, flowers similar to No. 4; it is very suitable for training with a single stem.

6, *gracilis tenella*.—Produces long flowers, on slender twigs.—The length of the flowers and footstalks render this kind a very graceful object, and well merits cultivation.

7, *gracilis multiflora*.—The foliage is of a very glaucous hue; the flowers are middle sized, of a bluish red, the lateral branches grow horizontal, and are very firm; the plant blooms very freely. This kind flourishes well in the open border.

8, *Thymifolia*.—The leaves are orbicular shaped; the flowers are produced in abundance, but rather hidden in the foliage; the flowers, in an infant state, are of a flesh colour, but change to a dark chocolate, they are of a small size. It is well deserving of culture in the open border, where it flourishes during summer, and is very pretty, but does not do so well in pots.

9, *Baxterii*.—A free growing kind, and will bloom when the plant is very small, but when it is planted in the open ground, and

attains three or four years' growth, it is a most brilliant shrub ; the flowers are of the shape of *F. globosa*, but are much larger, and of a finer colour. This kind will stand the winter well, and does not die down or suffer so readily as most other kinds do.

10, *excorticata*.—The leaves are very broad ; it is a shy bloomer if planted in the open ground, but if kept in a greenhouse in a pot, it will succeed tolerably well ; the flowers are of a bluish grey colour.

11, *speciosa*.—This kind is most like No. 3 ; the flowers are of a fine deep red, and long ; it will flourish well either in pots, or the open ground.

12, *hybrida*.—A very erect growing plant, having pale red flowers ; it will do well in the open border.

13, *Thompsoniana*.—This is a very fine variety ; the plant grows erect, with numerous lateral twigs, producing flowers in great abundance ; the corolla (centre portion of the flower, the outer part, red, being the calyx) is not so deep a violet purple as most other kinds are.

14, *arborescens*.—An upright grower, the foliage large and very showy. The plant produces one large branched tuft of flowers, at the extremity of a shoot, sometimes a moderate number of such will be produced upon a plant ; the flowers are small, and of a pale colour. It grows best in a pot kept in the greenhouse.

15, *conica*.—A very strong growing plant, and flowers freely ; the flowers are short and bulky, of a lighter red than either *virgata* or *gracilis*.

16, *globosa*.—A very splendid kind, a most profuse flowerer ; very small plants will bloom, even when but two or three inches high ; the flowers are of a globular, or balloon shape, before they wholly expand, of a very bright red colour. The plant will flourish either in the open border, or in a pot, and continue in bloom all the summer. It is decidedly the best kind for growing in rooms.

17, *lucidum*.—This kind has a leaf like a *Laurustinus*. It has not yet bloomed with me.

18, *bacillaris*.—Very much resembles No. 17, only is a stronger grower ; the flowers are of a light red or rosy colour.

19, *microphylla*.—The leaf is very small, as is the flower, but the plant is a most abundant bloomer. The plant does very well in the open border, where the flowers are produced much larger than when grown in a pot.

20, *Port Antonia*.—A very dwarf growing kind, having very slender twigs ; it has not yet flowered with me.

21, *floribunda*.—In growth and appearance the plant resembles No. 29, but it flowers very freely either in the open ground or in a pot.

22, *multiflora*.—Very distinct from No. 21, having a larger leaf, in shape something like a small holly leaf ; the flowers are of a light red ; the calyx is reflexed.

23, *longiflora*.—The individual who raised this variety, states that the flower is six inches long ; but it not having yet bloomed with me, I am not able to confirm the statement, though the stock of plants I possess of it grow very freely.

24, *macrostemma*.—This kind rather resembles *conica*, but it is not so stunted in its growth ; it is a most abundant bloomer, and when trained to a single stem several feet high, having lateral branches, it becomes a splendid plant ; the flowers are of a bright red colour.

25, *adolphina*.—A stiff growing plant, with long narrow leaves ; the flowers are large, and the corolla of a fine deep violet purple ; it blooms moderately free.

26, *elegans*.—This distinct and handsome plant is perfectly hardy, and flowers abundantly in the open border.

The above descriptions are from my own observations and practice. The tribe of plants is one much admired, and much in demand. I uniformly have a stock on hand of one thousand plants, some of which are near six feet high, grown in pots. I find very little difficulty in propagating the various kinds ; they will not all bear the same mode of treatment, but the best and easiest methods I have found are as follows :—

About the middle of August, from plants Nos. 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 17, 18, 19, 24, and 26, I take the cuttings, about three inches long, from plants growing in beds. Having cut each cutting close off under a joint with a sharp knife, I dress off the leaves from about one half the length of the cutting, being careful not to wound the bark in the least degree. I then plant them in fine soil and sand, in the open ground, choosing a shady situation ; having inserted them, I water them freely, in order to settle the soil properly round the base of each cutting. As soon as the wet is dried from the leaves, I place hand glasses over the cuttings ; I

repeat the watering when required, taking care to let the foliage dry before again placing the hand glass over them.

In about six weeks from putting off the cuttings, I find they have struck root, and are ready for potting. I pot them into sixties, and place them in a cold frame, keeping it closed for about a fortnight, shading when required. I then gradually inure them to the open air. During winter, I let them remain in the frame, sliding the lights down in the day, and closing them at night.

These sixteen kinds of Fuchsias I find tolerably hardy, if planted in the open air, having a deep, light, rich soil. The strong branches are tied up in winter, and protected with straw. At the spring season the branches shoot forth vigorously; they are then thinned out to three or four of the strongest. If the bed, or border, where the plant is, be covered four or six inches deep with mulch, as fern, &c. the plants being cut down to within a few inches of the ground, they shoot freely in the spring.

The kinds Nos. 10 and 14 require the same mode of treatment in propagation as No. 1; they grow freely in the open border during summer, but require being planted in the greenhouse in winter.

The kinds Nos. 16, 20, 21, 23, and 25, I find propagate best when cuttings are taken off in April or May, inserted in pots, and covered close with bell glasses. I place them to strike in a moderate hotbed; they are, in other respects, treated as the other kinds.

GENERAL CULTURE.—Those plants I cultivate in pots I train up with a single stem, from one to seven feet high, stopping them at any desired height, having them grown in a good rich soil; they produce numerous lateral shoots, which never fail to bloom profusely. I keep the plants in a cool greenhouse in winter, and prune them to a single stem in spring, and re-pot when the plants have begun to push shoots, and not before.

The sixteen hardiest kinds, enumerated above, are in open beds, and are either strawed up, or mulched during winter; and in the spring, I add the other, tenderer kinds, taking these latter up, and potting them before winter sets in.

I find all the kinds to flourish in a rich soil, having a portion of sand and peat mixed with it. Those cultivated in pots require well draining.

One of your Correspondents, CONVULVULUS MAJOR, enquires—
 “Do Nurserymen object to sell cuttings of the Fuchsia, &c.?” I
 ask, also, who would purchase cuttings when established plants of
 nearly the whole tribe of Fuchsias are only charged at from 6d. to
 1s. per plant?

WILLIAM BARRATT.

Wakefield Nursery, July 3d, 1834.

ARTICLE VIII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
 By ST. PATRICK.

(CONTINUED FROM PAGE 156.)

NAMES.	DESCRIPTION.
583 Quatre saisons sans epines.....	Fine pale blush.
584 Queen of the Pinks	Curled deep pink.
585 ———— Roses	Gay rose-colour.
586 ———— Violets	Fine purple blue.
587 Radians	Pale red.
588 Ranunculiflora	Small compact bright pink.
589 Reform.....	Pink and lilac mottled.
590 Reine Clôpâtre	Changeable scarlet.
591 ——— des Blanches	Very fine white.
592 ——— d’Espagne.....	Deep pink.
593 ——— des Roses	Crimson.
594 Renoncule	Bright blush.
595 Robinella.....	Large red.
596 Roi d’Angleterre	Red.
597 ——— des Feux	Fine deep crimson.
598 ——— de France.....	Deep red.
599 ——— des Français.....	Purple.
600 ——— de Rome	Deep red.
601 ——— des pays bas.....	Large fine bright red.
602 Rosa flos	Scarlet.
603 Rose bizarre	Curious white and pink speckled semi-double.
604 ——— Caroline	Deep rose.
605 ——— de meaux	Fine small pale rose.
606 ——— Maria	Light rosy blue.
607 ——— Matilda	Fine light crimson.
608 ——— noir	Dark crimson.
609 ——— sceptre	Curious pink.
610 Rosetta.....	Beautiful globe light crimson.
611 ——— minor	Small pale rose.
612 ——— superb	Fine crimson.
613 Rouge admirable.....	Fine scarlet crimson.
614 ——— agreable	New, fine red.
615 ——— formidable	Beautiful red.
616 ——— luisant	Pinkish red.
617 ——— nouveau	Large fine light red.
618 ——— varie.....	Fine curled bright red.
619 ——— vif.....	Crimson and blush.
620 Royale Crimson	Very fine.
621 ——— Purple	Large and fine.

	NAMES.	DESCRIPTION.
622	Royal Grandis	Small pale bluish.
623	——— Mantle	Fine bright bluish.
624	——— Province	Large fine curled deep bluish.
625	Rubiflora	Bright red.
626	Rubrispina	Large fine red.

(TO BE CONTINUED.)

PART II.

EXTRACTS.

Plants figured in the following Periodicals for July :—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's
Professor of Botany in the University of Glasgow. Price
3s. 6d. coloured ; 3s. plain.

1. *Epidendrum bicornutum*, Two-horned Epidendrum. Class, Gynandria ; order, Monandria. Natural order, Leguminosæ. This charming orchideous plant is a native of Trinidad, and was introduced to the stoves of Europe by Messrs. SHEPHERD, of Liverpool. It was flowered by Mr. COOPER, of Wentworth Gardens, in April last : the flowers are large, white, and highly fragrant, smelling like those of the Persian Iris.

2. *Verbena chamædrifolia*, Scarlet-flowered Vervain. Didynamia, Angiospermia. Verbenaceæ. *Synonymus*, *Verbena veronicifolia*, V. Melindres, *Erinus Peruvianus*. No plant with which we are acquainted exhibits flowers of so brilliant and dazzling a scarlet as the present : and although a native of the Banda Orientale, the Plata, and the whole of the Pampas of Buenos Ayres, as far as the provinces of Cordova and St. Luis, it is found to flourish in the open air with us, and to bear our moderate winters unhurt. It should, however, as we may judge from the character of the soil in its native country, and indeed from what we know of the habit of almost the whole genus, have its roots well drained. It is then, too, better able to repel the effects of our severer frosts. It flowers during the whole summer, and if planted in patches of considerable size, or beds, it is impossible to conceive the splendour of its appearance without seeing it.

3. *Trachymene lanceolata*, Lance-leaved Trachymene. Pentandria, Digynia. Umbelliferae. *Syn.* *Azorella lanceolata*. A native of Port Jackson, where it inhabits dry, barren, rocky situations. "With us," Mr. ALLAN CUNNINGHAM writes from Kew, "it is a hardy greenhouse plant, and was first introduced to our culture in the King's Gardens, from a solitary individual springing up in a box of Orchideæ received from New South Wales in 1825. In that collection, it makes a variety among other compatriots ; where, although it belongs to a family possessing few external attractions to the horticulturist, it nevertheless recommends itself to the care of the cultivator, not less by the freedom of its growth, than by the ready disposition it exhibits to produce its ample umbels of flowers at various seasons." The petals are five, spreading, white, elliptical, entire. *Trachymene*, from the Greek *trachus*, rough ; and *mene*, a membrane,—on account of the tuberculated coat of the fruit.

4. *Ribes sanguineum*, Red-flowered Currant. Pentandria, Monogynia. Grossulariæ. *Syn.* *Ribes malvaceum*. Few, if any, of the numerous interesting and hardy plants introduced to our gardens by Mr. DOUGLAS, from

the north-west coast of America, are more truly deserving of cultivation, and of a place in our borders and in our shrubberies, than the present species. Its original discoverer was Mr. MENZIES, and it has since been gathered by Mr. DOUGLAS, by Messrs. LEWIS and CLARKE, and by Dr. SCOLEY, in countries extending from lat. 48°, in California to 52° N. Most of the species of this genus hitherto known to us, recommend themselves by the excellence of their fruit; their flowers being insignificant, both as to size and colour:—here we have a species remarkable for the fine purplish red of the numerous clusters of flowers, and the delicate green of the copiously veined foliage. But in proportion to the beauty of the flowers, in this instance, is the worthlessness of the fruit, which, though it has not, that I am aware, been produced in this country, is described by Mr. DOUGLAS as “turbinate, brownish black, bitter, having a tough, leathery, thick skin, with numerous minute, angular seeds, adhering together by a small portion of limpid, viscid mucus, and completely destitute of the pulpy substance common to most species of the tribe.” The whole plant possesses the peculiar fragrance of our Black Currant (*Ribes nigrum*). It is easily increased by cuttings, thriving well even in the west of Scotland; and in the early spring, before the foliage appears, it is rendered conspicuous by the copious racemes of flowers, which last till the full expansion of the leaves.

5. *Mimulus luteus*, VAR. *variegatus*, Yellow Chilean Monkey-flower, VAR. *Didynamia*, Angiospermia. Scrophularinæ. This is a very beautiful plant, quite hardy, and deserving a place in every garden, flowering as it does almost the whole summer through. [See Vol. I. plate 9.]

6. *Acacia elongata*, Slender curved-leaved Acacia. Polygamia, Monœcia. Leguminosæ. This slender and graceful species of Acacia is frequent on the Blue Mountains of New South Wales, and it also inhabits rocky hills in the interior to the westward of Port Jackson, where it was originally discovered during the first expedition of Mr. OXLEY on the Lachlan river, in 1817; but was not introduced to the English gardens till 1823, when plants were raised at Kew from seeds sent by Mr. ALLAN CUNNINGHAM.

7. *Acacia umbrosa*, Shady Acacia. Introduced in 1823 by Mr. A. CUNNINGHAM. “It delights in dry shady woods in New South Wales, in the mountainous districts on the coast; at Illawarra, and elsewhere.” It flowers in the spring, and its blossoms are powerfully fragrant.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. Price 4s. coloured; 3s. plain.

1. *Rhododendron arboreum*, VAR. *album*, White Tree Rhododendron. The previously raised varieties are, Scarlet and Rose. Decandria, Monogynia. Ericæ. Never did we behold any flower more perfectly lovely than was this, when received from the conservatory of W. WELLS, Esq., Redleaf, Tunbridge, Kent, in February last. Its leaves of the richest and deepest green, mellowed by the warm tone of their under surface—its large clusters of bell-shaped flowers hanging loosely, yet compactly, by their slender stalks—and the half-transparent snowy corollas, without a stain or a spot, save what Nature had given them to render their whiteness the more pure and brilliant,—formed together an effect which few objects could rival, and none surpass. It far surpasses the other varieties. The only way to treat the kinds successfully in this country, is as hardy conservatory plants. Rhododendron, from *rhodo*, rose; and *dendron*, a tree.

2. *Trileta laza*, Loose-flowering. Hexandria, Monogynia. Asphodelæ. Mr. BENTHAM (*Hort. Trans.* Vol. I. N. S. page 413) remarks, that this is “a very handsome plant, the scape of which is from a foot to eighteen inches high. Its flowers are about an inch across, of a deep blue colour; they grow in a lax umbel. It seeds freely, and will soon be common.” It is easy

to cultivate, and will grow in any common garden soil, but prefers a mixture of peat, loam, and sand; is perfectly hardy; if allowed to remain, will propagate itself by offsets as well as by seeds. It blooms in June and July, having about twenty flowers in an umbel. *Triteleia*, from *treis*, three; and *teleios*, complete,—in allusion to the perfectly ternary arrangement of its parts.

3. *Garrya elliptica*, Elliptic-leaved. Diœcia, Tetrandria. Garryaceæ. A hardy evergreen shrub, native of Northern California, where it was discovered by Mr. DOUGLAS. It was introduced in 1828, and a plant flowered for the first time in October last, in the Garden of the London Horticultural Society. In appearance it is very similar to a *Viburnum*, and, like that genus, is readily increased by layers. It prefers a loamy soil. This plant appears to represent a natural order altogether distinct from any previously known. The flowers are in long pendulous amentums, of a pale green colour. Altogether it is a very pretty shrub. *Garrya*, named by Mr. DOUGLAS in compliment to NICHOLAS GARRY, Esq., Secretary of the Hudson's Bay Company.

4. *Geodorum fuscatum*, Painted flowered. Gynandria, Monandria. Orchidææ. A single plant of this new species of *Geodorum* sent to the London Horticultural Society from Ceylon by Mr. WATSON, in 1832, flowered in the Chiswick Garden last July. It thrives in a hot damp stove, but requires to be rested after its leaves have withered. The flowers are produced in a pendulous tuft of ten or more together, compact; they are of a rose-colour outside, striped with white, about half an inch across; the inside of the flower is white, striped with red. *Geodorum*, from *ge*, the earth; and *doron*, a gift.

5. *Sphaerostema propinquum*, Small-flowered. Diœcia, Polyandria. Anonaceæ. *Synonym*, *Kadsura propinqua*. A hothouse climber, found by Dr. WALLICH, in Nepal, on Mount Sheopore, and on the hills about Sankoo. It flowered last July in the Horticultural Society's Garden at Chiswick. The flowers are yellow and brown, about an inch across, produced singly at each leaf, or joint of the shoots; they are succeeded by long pendulous shoots of scarlet berries. *Sphaerostema*, so named from *sphaira*, a globe; and *stema*, a stamen,—in allusion to the structure of the male flowers.

6. *Lupinus densiflorus*, Dense-flowered. Diadelphia, Decandria. Leguminosæ. Raised in the Garden of the Horticultural Society from seeds sent from California by Mr. DOUGLAS. The flowers, which grow in distinct whorls, are white, delicately stained with pink; they are also a little speckled at the base of the vexillum. The stem does not grow above six or seven inches high. It is a hardy annual, but rare, hitherto producing few seeds. *Lupinus*, from *lupus*, a wolf,—in allusion to the exhausting habit of the plant.

7. *Yucca superba*, Superb Adam's Needle. Hexandria, Monogynia. Liliacææ. *Synonym*, *Yucca gloriosa*. It has bloomed with the Hon. and Rev. WILLIAM HERBERT, who says that he bought the plant twenty years ago of Mr. MALCOLM, of Kensington Nursery, and that it is unquestionably the most magnificent plant in the flower garden. The flower stem rises eight or nine feet high; and the profusion of blossom is so great, that as the lateral shoots are rather sub-erect than diverging, a pin cannot be passed between the flowers in the centre of the column. The deep crimson of the stalks and stem, and the purple stripe on the outer petals of the flower, remind one of *Crinum amabile*. It is a very hardy species, and flowers frequently. *Yucca*, from its name in use in St. Domingo.

The Botanic Garden. Edited by Mr. B. MAUND, F.L.S. Price 1s. 6d. large; 1s. small: coloured.

1. *Rosa rapa*, Double Burnet-leaved Rose. Icosandria, Polyginia. Rosaceæ. Introduced from America in 1726. It is commonly cultivated as a

straggling bush, in which form it has less to recommend it than many other species; but pruned to a head, on its own stem, it assumes the habit and appearance of a budded standard. All the strong Roses may be grown on their own stems, in precisely the same form as budded stocks. There is no general charm in budding, productive of peculiar growth. The compact head of small laterals can be produced by pruning alone, and so regulated as to be far more ornamental than the loose bushes usually seen. The situation and other circumstances should, of course, influence the taste in adopting any particular mode of training. Where Rose trees form fence lines, the natural fence-like character should be assumed; but where there is no attempt at natural grouping—where the charm is dependent on the neatness, on the floral elegance, and nicety of keeping in detail, Roses may be so pruned as greatly to aid the design. Here it is that dwarf standards should embellish the picture. If Roses be already established in proper situations for standards, it only remains that attention be paid to pruning, and this peculiarity of form may at once be produced. It is true that all Roses are not equally suitable for the purpose; but those of the more delicate Chinese species, whose stems would not strengthen into a sufficiently firm standard, may be budded, and certainly with some advantage to the size of their flowers. We aim not at superseding the budding of standards, but at bringing into view the more easy means of arriving at similar results; of which means, from the pressure of fashion, cultivators seem to have lost sight. To effect this purpose, young free-growing suckers should in summer be tied to upright stakes, and kept quite free of small lateral shoots. When they are as tall as is required, stop them by cutting half an inch off their tops. If this can be done in the middle of summer, side shoots will be soon emitted, all of which should be cut off excepting the three upper ones. In the succeeding February, prune each of these three laterals back to within two or three eyes or buds of the stem, and they will flower in the summer. If the suckers be not tall enough in one season, another season must be taken, observing the same general rules.

2. *Geranium Ibericum*, Iberian Crane's Bill. Monadelphia, Decandria. Geraniaceæ. This free-flowering species of *Geranium* is a native of Iberia, from whence it was introduced in 1802. It is a perennial, grows two feet high, and flowers from June to August. It will flourish in almost any soil and aspect.

3. *Cryptostemma calendulaceum*, Marygold-flowered *Cryptostemma*. Synonymia, Frustranea. Compositæ. Introduced from the Cape of Good Hope in 1752. It is an annual; grows eighteen inches high, and flowers in July and August. The seed, if sown in the open border, should not be sown till the end of April; but it is far better to sow it three weeks sooner in a hot-bed, which will ensure an earlier blossom, and a greater chance of fertile seeds.

4. *Sedum oppositifolium*, Opposite-leaved Stonecrop. Decandria, Pentagynia. Crossulaceæ. This is a very ornamental plant for rock-work, both when it is in flower and out. Almost any situation will suit it. It is a native of the south of Europe. Grows six inches high, and flowers from July to September. The Latin word, *sedere*, to sit, constitutes the root of the generic name *Sedum*; it is intended to apply to the close manner of the growth of the plants of this genus on their native rocks.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON DESTROYING THE APHIS.—What is the most simple and ready method of destroying the Aphis, or green insect which infests Roses, Carnations, Auriculas, &c.?

Will INNOVATOR be so kind as to inform us the size (in inches) of the pot he uses for flowering a single Carnation plant? In his Article on the Carnation, he says a "sixteen," which, according to the standard given at page 44 (Vol. II.), is six inches; and in correcting it in the June Number, he says the pots should be "four to the cast," which would be a pot 12 in. diameter,—leading us, I fear, still further into error; unless, indeed, he means that a 12 in. pot is the size for three plants. C. N.

Truro.

ON A LIST OF PHLOXES, &c. &c.—I should feel exceedingly obliged if you, or any of the correspondents to your very useful Magazine, would give me a list of from one to three dozen hardy Phloxes, to be placed in the same border, the low-growing ones being mentioned, that they may be planted in the front,—so as to have a succession of bloom, that the border may be gay throughout the summer. If not quite hardy, is there any way of protecting Phloxes in the ground, as I have neither pit nor greenhouse? Also, the best way of propagating Phloxes of all species. Is there any way of destroying the blight in Rose bushes? I went to some expense last year in procuring some fine sorts of Roses, and am afraid I shall not have a single perfect flower. If it would be considered useful, I have a never-failing recipe for making the Yellow Rose tree blow perfectly, which I would send to your Magazine if desired.* I have no doubt it would succeed with other Rose trees; but in the first place, it would be too troublesome for any thing less precious than a Yellow Rose, and in the second it would not do for bushes.—Do you know the *Lobelia purpurea*? I do not mean the common purple *Lobelia*, but a new sort that I raised from seed last year, sent from the Horticultural Society. If you do, can you tell what I should do with them during the winter? They are now in a border for bloom.—I have the splendid new *Gladiolus*; it appears healthy, and the foliage fine (though raised in a room at the open window): but it has as yet no appearance of bloom. What should I do with it?—I am quite ashamed of being so troublesome with questions, but I hope the answers will be acceptable to others as well as myself.—I have seen a double white *Hepatica*, but only in a private garden: I could not obtain a plant even for myself.—I delight in your Magazine, more especially now that your correspondents appear more peaceably inclined. Hitherto I have been afraid to write a line, or to venture an opinion, for fear of getting into a "scrape." Now I shall be happy to contribute what little experience I have had. My garden, though only a young lady's one, is allowed even by my rivals to be very blooming, considering the disadvantages I labour under from want of sun, and exposure to north-east and westerly winds. It is said that all gardeners are conceited—so now I have shown the cloven foot, I will leave off. FANNY ENYAM.

June 5th, 1834.

P.S. I can never obtain a bloom of those delightful flowers the Lily of the Valley, notwithstanding my shady situation. Can you tell me the reason?

ON THE DARK CHINA ROSE.—I wish some of the readers of the *Cabinet* would have the goodness to inform me what soil will *suit*, and make flower in *profusion*, the Dark China Rose: also, whether there are two or more varieties of it; and if so, which would be the kind most likely to answer, so as

* We shall be much obliged by it.—COND.

to make a handsome bed in the flower-garden. I had a clump planted, of three dozen plants, and although this is the second season from planting, they make no growth, or show. Our soil is flint and chalk. We have done what we could to improve it. I suppose a mixture of leaf and turf with stable-dung will improve any soil. A Greville Rose has grown to a good height, but has never borne a flower. Any information calculated to be of service to me on the above points, I shall be obliged by. C. S.

ON BALSAMS, &c.—In your Number for March 1833, some very valuable information was given by ST. PATRICK, for cultivating Balsams. As he has been so successful in growing that beautiful flower, I beg to crave his advice as to *saving the seed*, and his opinion why I failed. Last year I had extremely fine DOUBLE flowers of several colours, and carefully saved the seed, which I kept very dry and warm. This year, however, all are *single*, and white. How is this to be accounted for? C.

9th July, 1834.

P.S. Where can seed be procured which may be depended on?

ON MR. DENYER'S ARTICLE ON GERANIUMS.—Allow me to make a few queries and remarks, through the pages of the *Floricultural Cabinet*, on the third Article in the June Number, page 129, entitled, "On the Culture of Geraniums," &c. Previous to June, does MR. DENYER stop the leading shoot or not? What compost does he use? Does he pot them after the middle of August, and how does he treat them after that time? Does he keep them in the open air, cool frame, or greenhouse? MR. DENYER, in the commencement of his paper on the subject, wishes to inform J. T. of a detail of culture, which he says will answer every expectation. Now from this all your subscribers would undoubtedly expect to find the whole routine of culture, which he has certainly given till the second week in August; but after then, nothing further is said about them, which is leaving out the principal part. I must say that the whole is a very imperfect communication, in respect to giving perfect information; and what makes it more so, is, that Mr. D. has sent it in the form of an answer to J. T.—I hope Mr. D. (who, by the bye, is an old acquaintance) will not ascribe the above remarks to any rancorous feeling in me, for that is not the case; but only to solicit in future more perfect observations on so agreeable a subject.

F. F. ASHFORD.

ON COMPOST FOR FLORISTS' FLOWERS.—Writers on the treatment of Auriculas, Carnations, Pinks, Tulips, Ranunculuses, &c. give lists of certain composts which are to be frequently turned and stirred during the space of two years, so as to become intimately mixed. Of these composts, many of the ingredients must be exceedingly offensive; and unless premises be sufficiently capacious to appropriate a place entirely for this purpose, few persons would endure so intolerable a nuisance;—therefore, those only who possess roomy premises can derive benefit from the use of them. I wish to inquire, amongst your numerous correspondents, if any persons have already engaged in the business of compost-making, and retailing the same in a fit state for immediate use: and if so, where they are to be found. If none such exist, then I would suggest that it might answer the purpose to commence such an undertaking without delay; and if conducted faithfully according to the different recipes—using the very materials and quantities recommended by the several authors—I apprehend the article would meet a ready sale; for doubtless most persons fond of flowers would cheerfully pay a reasonable sum per bushel for any particular compost they might require for immediate use. H. S.

24th June, 1834.

ON AN ANNUAL LIST OF PRIZE FLOWERS.—In Vol. I., page 63, you have given a list of flowers that obtained the leading prizes in the year 1832. I hope you mean to render annual a list so truly useful to amateur collectors; and that I shall, in an early Number, have the pleasure of reading a similar list for 1833. H. C.

London, July 8th, 1834.

[We will attend to the Article.—COND.]

ON THE GARDEN ANEMONE.—Does not INNOVATOR, in his article on the culture of the Garden Anemone (*Anemone Hortensis*), mean *Anemone coronaria plena*, *Hortensis* or *stellata* being the Star Anemone?

Pl. Ry., Hastings.

A SUBSCRIBER.

ON A LIST OF THE BEST PANSIES.—Will you, or any of your numerous correspondents, give me a list of about a dozen of the very best Heartsease? I mean such as have good properties, and generally take the first prizes at Horticultural and Floral Societies' Meetings. I shall be much obliged by an early answer, as I wish to purchase a few immediately, so as to have them in flower the latter end of autumn.

HERB TRINITY.

July 11th, 1834.

ON THE RANUNCULUS.—I have attempted to grow the *Ranunculus* these last two years, but have been unsuccessful. I observe that most of your Correspondents who have written on the cultivation of that Flower, advise water to be given between the rows, and not to wet the foliage; which rule I have followed; but one says he has frequently observed that a cool and showery May has been very conducive to the growth of the plants, and has ensured a fine bloom in June. On some former occasions I have admired the calm reasoning of your Correspondent G. I. T.; now I should take it as a particular favour if he would have the goodness to explain, physiologically, what effect water has on the leaves of that plant.

July 9th, 1834.

A COUNTRYMAN.

ON A LIST OF HARDY BORDER FLOWERS.—You would very materially serve your inexperienced subscribers to the *Floricultural Cabinet*, by giving them, in one of your early Numbers, a list of hardy border flowers, annual and perennial; dividing them into four classes as to colour, three as to height, and six as to their time of flowering, I annex, by way of explanation, an attempt at the sort of thing required, which, however, your experience will no doubt enable you to improve upon.

Perennials flowering in February and March.

Name.	Red.			White.			Blue.			Yellow.		
	1ft	2ft	3ft	1ft	2ft	3ft	1ft	2ft	3ft	1ft	2ft	3ft
<i>Heptaca triloba</i>	*	*
<i>Pulmonaria officinalis</i>	*
&c. &c. &c.												

Annals flowering in February and March—same as above:

And so in like manner those flowering in April and May—June—July—August—September and October.

Mr. J. PRICE, who furnished your Work with a very intelligible Article on soils, was so good as to promise us further observations on the subject. If his time would allow of it, he would much increase the former obligation by resuming the subject.

If AMICUS has not yet satisfied himself with a yellow trailing plant, perhaps the *Lysimachia Nummularia* would answer his purpose, or else a yellow Pansy.

Could you favour your subscribers with a list of the most hardy and showy Cape bulbs, and the prices of them, as well as the address of the person who imports them most largely, or cultivates them? Pray also inform us whether the *Nemophylla phaceloides* is an annual or perennial. LOUBON'S Catalogue classes it among the latter, but most seedsmen's lists call it an annual.

W. W. J.

Crickhowel, 14th July, 1834.

ANSWERS.

ON EARWIGS.—In answering a Correspondent's request, inserted in page 139, I believe the most effectual method to destroy Earwigs from any trained Trees, is to place, in various parts, pieces of reeds between the branches and

the wall from four to six inches long. They will generally be found to contain a number of these insects every morning; and by taking out the reeds, you may blow the insects into a basin of hot water. H. W.

ON THE CULTIVATION OF BALSAMS.—As your Correspondent, SNOWDROP, justly remarks, that ST. PATRICK, in page 37, May No. of your *Magazine*, has said enough to deter any one from cultivating this lovely Annual; yet SNOWDROP, a concise, clear, and caustic writer, treats on this flower as if it were a *hardy* Annual; the fact is, Balsams require to be sown in a hot bed the commencement of April—if the season is not very favourable, the sowing should be deferred till the latter part of the month, or the first week in May. At the latter period, a hand glass may then be dispensed with. When the plants are sufficiently strong and hardy, they should be transplanted into pots filled with rich loam, and introduced to a stand in a drawing-room; or, if preferable, transplanted in a bed of rich loam on a south border. My plants never failed by pursuing this system. I hope these remarks will not offend your Correspondents, ST. PATRICK or SNOWDROP, as it is neither my wish nor intention to do so. EMILY ARMSTRONGE.

Castlerahan, Ireland, March 21st, 1834.

ON THE CULTURE OF THE FUCHSIA IN THE OPEN BORDER.—In reply to A CONSTANT SUBSCRIBER, in Vol. II., page 68, of your useful *Magazine*, I beg leave to refer him to the excellent Article on the above-named brilliant flower, written by A JERSEY GARDENER, page 196 of Vol. I., and he will find in the said Article, that cutting down the plants in the autumn, as practised by Mr. SHARMAN, is not so advantageous to it as cutting them close in the beginning of the month of April. I have tried both ways, and found spring the best season, for the reasons stated by your Jersey Correspondent. Let A CONSTANT SUBSCRIBER bear in memory, that some of the other varieties of this lovely family of plants are of lower growth, and more impatient of cold than the *gracilis*, and requiring to be mulched around the roots during the severe winter months. The cultivator of this beautiful flower must be under considerable obligation to your Jersey Correspondent for his valuable communication.

EMILY ARMSTRONGE.

Castlerahan, Ireland, March 21st, 1832.

ON THE CULTURE OF THE AURICULA.—I collect my compost in the months of July and August. It consists of four barrows of horse-dung, the same quantity of cow-dung from the fields, one barrow of leaf mould, eight of pasture sods, and one of sand. I lay the whole together, and turn it over three or four times during the winter. It will be ready for use the following May. EDWARD EDWARDS.

ON BLOOMING AGAPANTHUS UMBELLATUS.—I have successfully cultivated the *Agapanthus umbellatus*, for some years, by the following treatment:—I put my plants under the stage in the greenhouse during the winter months, or a dry shed will serve as well. I give them no water while in this state. I take them out in the beginning of April, and part them to one stem, then place them in 16-sized pots, (or pots one foot in diameter,) using any vegetable mould with one part sand. They are then watered to settle the mould, and placed in a warm situation. I water them twice a day in the summer months, but do not stand them in water. After they have done flowering, the old stems are cut down, and placed in a cold, shady spot till November, when they are moved to their winter quarters. They will also succeed, if turned out into a bed of rich mould, and plentifully watered.

EDWARD EDWARDS.

ON THE GREEN FLY.—If by the Green *Fly* your Correspondent, WILLIAM FREDERICK, means the small green insect (*Aphis*) which so frequently infests the buds of Roses, as well as other flowers, I believe I can inform him of a very simple and effectual mode of destruction; let him water over the heads of the plants, with water in which Potatoes have been boiled, and unless he be more unfortunate than I have been, he will find the insects disappear after the first application. I should say, that though the liquid does not at all

injure the *plant*, it will kill any *flower* that it touches. Tobacco water has, I believe, this latter effect.

Will you, or any of your Correspondents, have the goodness to inform me, which is the best publication on the management of Greenhouse plants, as to the regular routine of their culture, and also as to the most approved sorts for cultivation. Your Correspondent from Bodmin, has, in your last number, so completely forestalled some requests I was about to trouble you with, as also in some observations I had intended to make, that I could fancy he must have had a sly peep into my very thoughts; however, all I have now to do, is to hope, that his communication may be speedily and effectually answered.

S. C. A.

ON SULPHATE OF LIME, &c.—A person, calling himself Ignoramus, requests an explanation of the manner of preparing the sulphate of lime for Innovator's carnation compost. Now, if Ignoramus had just taken the trouble to ask one of his neighbours, more enlightened than himself, he might have found out that limestone is carbonate of lime—not sulphate of lime, as he thinks; for sulphate of lime, when burnt, is plaster of Paris. Sulphate of lime, or gypsum, is generally called by masons (who generally keep it) plaster; it may easily be powdered in a mortar, and sifted to any degree of fineness.

Another correspondent wishes to know the method of preserving the Magnolia from earwigs. Does he suppose that there is a particular method for every species of plants? Let him look at the former numbers of the *Cabinet*, he will find two or three methods of destroying them.

D. PEARCE wishes to know the meaning of the term pin-eyed, when applied to the Polyanthus. Let him ask the next florist he meets, and not place himself on a level with Ignoramus.

ROBERTUS.

REMARKS.

TO PREVENT SLUGS FROM DESTROYING DAHLIAS AND SEEDLING ANNUALS.—I have for the last two years applied finely chopped horse-hair round the young plants, and found that it completely succeeded; the hair I use is that which is clipped from the horses' heels.

A SUBSCRIBER.

Pt. Ry., Hastings.

CAMBRIDGE FLORISTS' SOCIETY.

The ninth anniversary of the above Society was held on Monday, July 14th, in the large Concert Room, at the Hoop Hotel. The Carnations and Picotees exhibited on this occasion were very fine; the amateur cultivators declaring them to be superior to any previous shew of the same flowers. The grand prize stand exhibited 132 beautiful blooms arranged in classes, and selected from upwards of 500 sent in for competition. The long range of tables down the centre of the room, were graced with several fine specimens of *Humea elegans*, *Fuschias*, *Balsams*, *Geraniums*, *Cockscombs*, *Calceolarias*, *Bouquets of Cut Flowers*, &c. &c. Mr. Widnall's collection of *Pansies* (100 varieties) was much admired: but his stand of *Dahlia* blooms attracted all eyes, and drew forth the plaudits of every one who had the pleasure of beholding, for the first time, that magnificent and truly beautiful variety, justly named "The King of Dahlias," consisting of a finely formed flower of a delicate white ground, and every petal surrounded with a rich crimson feathering, much after the style of the Picotee called "Martin's Prince George." A very select party of about fifty of the members and friends of this flourishing Society, after the shew, sat down to a most excellent dinner, served in Mr. Ekin's best manner, and the evening was passed in the utmost harmony and conviviality. The following is the award of the judges:—

CARNATIONS.—*Premium Prize*.—New Purple Flake, (name not given in), Mr R. Headly. *Scarlet Bizarres*.—1, Houseman's Kinfare Hero, Mr R. Headly; 2, Heyworth's Leader, Do.; 3, Wilde's Perfection, Mr Hunt; 4, Ditto, Mr Giddings; 5, Walmsley's William IV., Mr R. Headly; 6, Wilde's

Perfection, Do. *Crimson Bizarres*.—1, Wakefield's Paul Pry, Mr R. Headly; 2, Ditto, Mr Ready; 3, Ditto, Mr R. Headly; 4, Ditto, Mr Cadling; 5, Ditto, Mr Ready; 6, Gregory's King Alfred, Mr Hunt. *Scarlet Flakes*.—1, Stearn's Dr. Barnes, Mr Hatt, sen.; 2, Ditto, Mr R. Headly; 3, Ditto, Mr Taylor; 4, Maude's Rowton, Rev. A. Fitch; 5, Stearn's Dr. Barnes, Mr Nutter; 6, Ditto, Mr Hunt. *Purple Flakes*.—1, New, (name not given in), Mr R. Headly; 2, Lascelles' Queen of Sheba, Mr Hunt; 3, Turner's Princess Charlotte, Ditto; 4, Leighton's Bellerophon, Mr R. Headly; 5, Knott's Alfred the Great, Do.; 6, Turner's Princess Charlotte, Mr Widnall. *Rose Flakes*.—1, Dalton's Lancashire Lass, Mr R. Headly; 2, Ditto, Mr Bailey; 3, Do. Mr R. Headly; 4, Ditto, Mr Nutter; 5, Ditto, Mr Green; 6, Fletcher's Duchess of Devonshire, Mr Giddings. *Seedling Carnations*.—1, Hunt's Teazer, (S.B.) Mr Hunt; 2, Newman's Beauty of Bourn, (S.F.) Mr Newman.

PICOTEES.—*Premium Prize for the best Picotee of any Colour*—Russell's Incomparable, Mr R. Headly. *Red Picotees (light edges)*.—1, Russell's Incomparable, Mr R. Headly; 2, Ditto, ditto; 3, Furze's Beauty of Bedford, Mr Giddings; 4, Woollard's Miss Bacon, Mr R. Headly; 5, Wood's Comet, Mr Giddings; 6, Ditto, Mr Nutter. *Red Picotees (heavy edges)*.—1, Martin's Prince George of Cambridge, Mr Hunt; 2, Ditto, Mr Nutter; 3, Ditto, Mr Bailey; 4, Ditto, Mr Nutter; 5, Ditto, Mr Twitchett; 6, Ditto, Mr R. Headly. *Purple Picotees (light edges)*.—1, Hufton's Miss Willoughby, Mr Giddings; 2, Ditto, ditto; 3, Ditto, Mr Cadling; 4, Ditto, Mr Giddings; 5, Wood's Countess of Sandwich, Mr Hunt; 6, Hufton's Miss Willoughby, Mr Cadling. *Purple Picotees (heavy edges)*.—1, Martin's Linneus, Mr Nutter; 2, Denston's Dr. Syntax, Mr Hunt; 3, Do., do.; 4, Bailey's Lord John Russell, Mr Nutter; 5, Martin's Linneus, Mr Bailey; 6, Bailey's Lord John Russell, Mr Nutter. *Rose Picotees*.—1, Wood's Andromache, Mr Hunt; 2, Not claimed; 3, Lee's Matchless Beauty, Mr Giddings; 4, Howden's Miss Hill, Mr R. Headly; 5, Purchas's Granta, Mr Giddings; 6, Ditto, Mr Hatt, sen. *Yellow Picotees*.—1, Louis Phillippe, Rev. A. Fitch; 2, Howlett's Paragraph, Mr Green; 3, Louis Phillippe, Mr R. Headly; 4, Howlett's Paragraph, Mr Giddings; 5, Life Guardsman, Mr Twitchett; 6, Maid of Magdeburg, Mr Green. *Seedling Picotees*.—1, Headly's Eliza, (red) Mr R. Headly; 2, Twitchett's Regulator, (red) Mr Twitchett; 3, Gidding's Beauty of Hemingford, (rose) Mr Giddings.

DAHLIAS.—*A Premium Prize for the best Collection, not less than twelve blooms, given by the Rev. A. Fitch*—King of Dahlias, Queen of Dahlias, Lord Liverpool, Lady Grey, Widnall's Salamander, Alice Gray, Neptune, Alba purpurea, Criterion, Widnall's Iris, and two Seedlings, Mr Widnall.

WOOLWICH FLORISTS' SOCIETY.

The Anniversary Meeting of this Society was held June 12th, at the Bar-rack Tavern, Woolwich Common, when prizes were awarded to the following persons for Pinks:—1, Stevens' Hon. G. Cook, Wilmer's John Wilmer, Unsworth's Omega, White's William the Fourth, Young's Marquis of Winchester, Barnard's Bexley Hero, Pittard's Eynsford Beauty, Norman's Benjamin, Norman's Hero, Norman's Defiance, Barrard's Conqueror, Norman's Earl Grey, Mr. Norman; 2, Dry's Earl of Uxbridge, Marquis of Winchester, Keen's No. 1, Unsworth's Omega, Downton's Goliath, Bray's Invincible, Norman's Benjamin, Eynsford Beauty, Keen's No. 2, Barrard's Conqueror, Mann's Dr. Sumner, Eyton's Beauty of Ware, Mr Ward; 3, Mr Cousins; 4, Mr Ibbett; 5, Mr. Creed; 6, Mr. Martin.—The Seedling Prize was adjudged to Mr. Ward, for a flower which he calls "Ward's Jubilee," which will be no doubt in the collection of every Pink grower who can obtain it, being a very superior flower. The average diameter of the flowers in the first prize pan was nearly 2½ inches to each flower, notwithstanding the unfavourable season; and one flower of Omega which was measured, exceeded 3 inches in diameter. After the censors, Messrs. Jeffery, Smith, and Buck, had performed their office, about 50 persons sat down to an excellent dinner, J. P. Burnard, Esq. of Holloway, in the chair.—There were three prizes for Ranunculuses awarded; but as the flowers which obtained them would have had no chance if ordi-

narly decent flowers had been exhibited, we have not noticed them. Unsworth's Omega is the flower which obtained the single bloom prize at the Metropolitan Society's Meeting this season, and was raised at Woolwich, where the principal of the stock is. It was exhibited in every pan, successful or otherwise, and justly deserves the character of a first-rate Pink.

REFERENCE TO PLATE.

1. *Village Maid, Rose*.—We received a specimen of this very beautiful and highly fragrant striped Rose, in June last, from Mr. W. ROGER, of the Southampton Nursery, which he informs us he purchased from the collection of a French florist, under the name of "Village Maid." The blossoms are entirely double, and it is totally different from the *York and Lancaster*, the one being a *Province* the other a *Damask* Rose. Mr. ROGER says, "if you devote a whole page to exhibit the drawing of this Rose, it will then only convey a very faint idea, indeed, of its beauty, the magnificent appearance of the large full headed plant worked on a standard has drawn forth the admiration of all who have seen it."

2. *Lucy*.—3. *Sir Walter Scott, Pansies*.—These two beautiful varieties may be obtained of Mr. HOGG, Florist, Paddington; who has a collection of all the best flowers now extant. For their culture, &c. see vol. I. page 199.

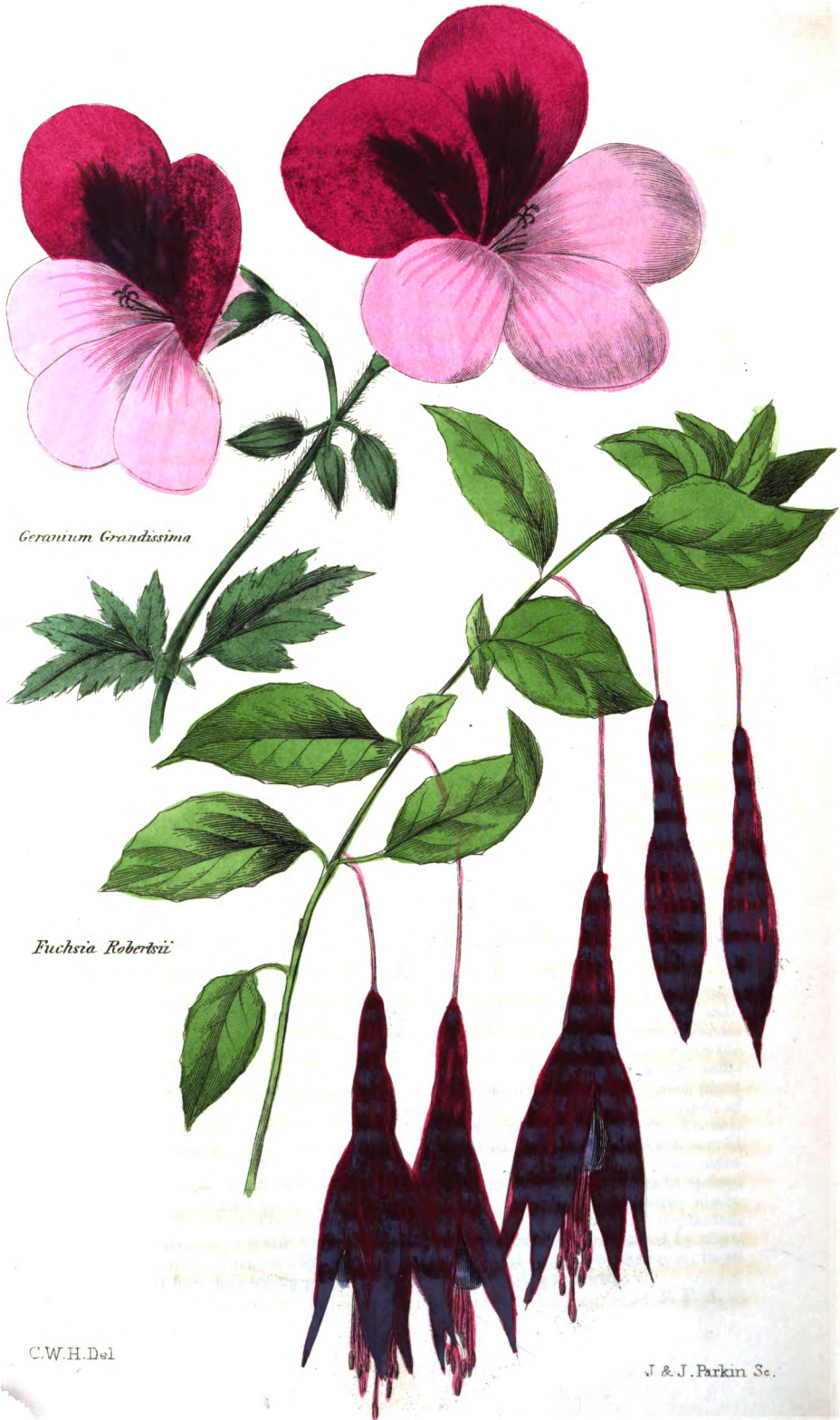
FLORICULTURAL CALENDAR FOR AUGUST.

PLANT STOVE.—Continue to admit a large portion of air daily, for the benefit of the plants in general in this department. Attention to watering, eradicating insects, and cleanliness, must be daily attended to.

GREENHOUSE PLANTS.—All exotic trees and shrubs belonging to this department, that are in want of larger pots, or refreshment of new soil, should (if not performed last month) immediately be done. This is the proper time to propagate Aloes, Sedums, and all others of a succulent nature, by means of suckers or bottom offsets; when detached from the parent, they should be potted singly into small pots, using light dry compost, and watering sparingly till they have taken root. In the first, or second week at farthest, inoculation may be performed on any kinds of the Citrus genus. (See the directions in the Calendar for July.)

FLOWER GARDEN.—Due care must be taken respecting watering any kinds of annual, biennial, or perennial plants, that may be in pots. Propagate by means of slips, and parting the roots, of any double flowered and other desirable fibrous-rooted perennial plants done flowering. Likewise increase by offsets the different kinds of Saxifrage. Auriculas should be cleared of all dead leaves, and shifted into fresh pots; prick out of the seed bed, where it was omitted last month, Seedling Auriculas and Polyantheses, in a shady situation: seeds may also be sown of both kinds in boxes or pans. Carnations may still be layered, also Sweet-williams, the earlier in the month the better. Those which were layered four or five weeks ago, will now be sufficiently rooted to be taken away and planted in beds or pots. Also plant out Pink pipings, which were put in in June. Sow seeds of all kinds of bulbous rooted plants in pans or boxes, such as Spring Cyclamen, Anemones, Ranunculuses, &c. &c. Those kind of bulbs wanted to increase should be taken up if the leaves be decayed, and the offsets taken off. Transplant into nursery beds seedling, perennial, and biennial plants sown in spring. In dry weather gather those flower seeds that are ripe of any desired kinds. Plant out such kinds of autumn flowering bulbs as yet remain unplanted. Heartsease, towards the end of the month, should be propagated by slips, put into a shady border, and kept quite moist till they have taken root; these will form fine strong plants for blooming the spring following.

F. F. A.



Geranium Grandissima

Fuchsia Robertzii

C.W.H. Del

J. & J. Parkin Sc.

THE
FLORICULTURAL CABINET,

SEPTEMBER 1st, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Cultivation of Heliotrope (Heliotropium peruvianum)*. By Mr. ASHFORD.

Perceiving that a Querist (MYRTELLA) in the *Floricultural Cabinet*, Vol. II. p. 93, solicits a little information on the cultivation of the Heliotrope, I am induced to pen the following brief remarks; at the same time assuring him that they are not mere theoretical suppositions, but the result of long experience and practical observations.

For the instruction of the juvenile portion of your readers, and others who are interested in the study of Botany, I shall add a short botanical account of the plant.

Heliotropium peruvianum, or Peruvian Turnsole, is an ornamental trailer of Peru, whence it was introduced into this country in the year 1757. The generical name was given it by LINNÆUS, from *Helios*, the sun, and *trope*, turning; in allusion to the flowers being always turned towards the sun. Both PLINY and DIOSCORIDES assert the same reason as its Swedish author. The specific name, WILLDENOW derived from its native country. It belongs to class 5, order 1, Pentandria (*pente*, five—*aner*, a man, or male organ,) Monogynia (*monos*, one—*gyne*, a woman, or female organ,) of the Linnæan classification of plants, and to the order Boraginææ of sub-class Corollifloræ of the Jussieuean natural arrangement. The botanical characters of the whole genus, or generical ones, are—a calyx quinquefidus, or five-parted; corolla hypocrateriform,

monopetalous, pentaphyllous, with the sinuses simple; stamina five filaments, furnished with small anthera; pistillum, four germina, slender stylus, and notched, peltate stigmata; pericarpium none; semina four, oval, cohering, and lodged in the calyx. Specific characters are—*folium lanceolate ovate*; *caulis frutescent*; *floris aggregate, corymbose*.

This production of the Peruvian clime is well worthy of cultivation: its delightful fragrance and (by the following management) long continuance in flower, well repay any occasional care or extra attention bestowed upon the plants. I have very often seen them grown and treated in a similar manner to greenhouse plants, but when treated in this manner, I always notice leafless, sickly-looking plants. Upon close application to the culture of the Heliotrope, in common with others, I find the following method to answer best, and produce as fine flowering plants as any I ever see. Such being the case, I humbly present the particulars of the same for the consideration of MYRTELLA, and your other numerous correspondents and readers.

Propagation.—Cuttings must be procured about the latter end of February or beginning of March, planted in pots of rich garden soil, and plunged in a working Cucumber or Melon frame. When the sun is powerful, that part of the light where the pots are under must be covered with something, to shield them from the overpowering heat of the solar rays. Water must be given when required, and all mouldiness, decayed leaves, &c. should be removed as they appear; for if suffered to remain, they will probably injure the whole. In two or three weeks, the cuttings will be sufficiently struck for potting; but previously to so doing, remove them to an airy part of the stove for a few days, to harden. If a succession of flowering plants for the autumn and winter months are required, more cuttings must be put in during May and June. If any plants are wanted for turning out into the flower garden in summer, cuttings must be struck in September for that purpose.

Cultivation for Flowering in Pots.—Provide for a good compost equal quantities of maiden loam, rotten horse-dung, and sandy peat; a little leaf mould might also be added. The whole should be well chopped and incorporated together, after having been ameliorated by the frosts and atmosphere of the preceding winter, but should not be sifted. When the cuttings have been in the

stove for a few days, pot them off into 48-sized pots, using the above compost, and allowing as much soil to adhere to the roots as possible. Pinch off the extremities of each shoot, to cause the plants to grow bushy; and after giving them a suitable watering, place them in a shady part of the stove till they have taken root and begun to grow, when they should be removed to a more exposed situation in a house of the temperature of from 60° to 70° Fahrenheit. Due attention must be paid to repotting them as often as they appear to mat around the outside of the balls, or the plants will soon assume a sickly hue, instead of being clothed with fine green foliage. These plants are very subject to the attacks of that destructive inmate of the hothouse—that pest to gardeners, the green fly (*aphis*). These should not be permitted to remain, but be eradicated as soon as perceived, by syringing them every morning with pure water. If the plants are removed when in bloom to the greenhouse or conservatory, they will continue in flower much longer than when remaining in heat. When they have done flowering, set them in a cool part of the greenhouse until the following February, when they should be cut down, their balls reduced, themselves repotted in the above soil, and plunged in a hotbed, to produce healthy young shoots for propagation; after which the old stools may be either turned out into flower borders, or thrown away, as young plants raised every year are far preferable for flowering in pots.

Cultivation for Flower Borders.—After the cuttings are struck, let them be potted off in the same sized pots and sort of soil as above noticed, and wintered in the greenhouse, or in a house I have recommended in a former Number. In the following March, pot them into pots a size larger, to cause them to produce fresh shoots and roots. Towards the middle of April, begin to expose them gradually to the open air; so that about the end of May, if the weather prove mild, they may be able to bear being planted out into beds or baskets, composed of good mellow, rich soil. Should cold nights happen after they are turned out, as is sometimes the case, they must be defended by means of hoops and mats, or canvass; thus protected, they will grow and flower freely till the chilly nights of autumn put a check to their vigour; they must then be taken up with their balls entire, and potted in suitably sized pots. If placed in the stove, and shaded for a few days,

they will continue to flower till Christmas, when a few cuttings may be taken off for early propagation, and the old roots thrown away.

I have thus endeavoured, in as short a space as possible, to pen down my process; and I do not hesitate to say that it will, after a fair trial, satisfy every grower of this native of the Peruvian shores. If you deem the remarks worthy of admission into the valuable pages of the *Floricultural Cabinet*, they are entirely at your service.

FREDERIC F. ASHFORD.

Somerford Booths, April 27th, 1834.

[*H. corymbosum* is far superior to the above species for being cultivated in the open border.—COND.]

ARTICLE II.—*On the Cultivation and Raising of the Polyanthus.* By Mr. JOHN REVELL, Florist, Pitsmoor, Sheffield.

The Polyanthus being a flower which I have grown to a great degree of perfection for several years, I herewith forward you my mode of treatment. The following is the compost which I have found to succeed the best:—3 barrowfuls of light maiden soil; one do. of horse dung, six weeks old; one do. of decayed leaf-mould. Those plants that I intend for show, such as Waterhouse's George the Fourth, Pearson's Alexander the Great, Crownshaw's Invincible, Burnard's Formosa, &c. &c., I plant in August; for if done sooner they are in bloom too soon for the show, which takes place about the latter end of April or beginning of May. In parting the old roots, I cut off all the leaves, then pot them in the above stated compost, and place them in a shady situation, where I let them remain till November, at which time I remove them to their winter situation, which is a pit built of brick, and sunk two feet below the level of the surface of the earth, so that when the pots are placed in the pit, the rims of the pots are no higher than the surrounding surface; this pit is covered with wooden shutters, instead of glass lights, in order to secure the plants from the effects of sudden frosts during the winter. I suffer them to receive all the gentle showers that fall during February and March. When the plants have thrown up their flower stems and the truss is formed, I cut out the centre small buds, leaving the largest; I

never leave more than seven or less than five pips on each stem; if any of the petals are irregular by turning backward, I flatten them with a piece of ivory made in an appropriate shape, somewhat resembling a button-hook: I place the flattener underneath the pips and presses it upwards; but, if the flower is cupped, I press it downwards until the petals become quite flat; if any of the pips are dusty, I brush them with a camel-hair pencil, which gives a brightness to the flowers. When in blow, I carefully shade them from the sun's rays; for if I was to suffer them to be exposed, the colour of the flower would be damaged, if not totally spoiled. I find that if the plants are placed in perfect darkness for two or three days previous to the show, the colour becomes much darker than if left in the frame. The following kinds possess the best properties of any I know:—Cox's Prince Regent, Lord Crewe, Bang Europe, Turner's Princess, Countess, Lord John Russell, Commander-in-Chief, Mary Ann, Beauty of Over, Park's Lord Nelson, and Othello. As soon as the plants have done flowering I take them out of the frame, and place them upon a bed of coal ashes, that the seed may be able to ripen; as soon as the seed pods begin to burst open at the top and change colour, I carefully cut them off, and place them in the seed-drawer till required for sowing.

I always sow the seed about the middle or beginning of February, the year after it has been gathered. I sow the seed in pans or feeders filled with the compost in which the plants are grown, I then sprinkle the soil with water, sow the seed, and cover a quarter of an inch deep with the same compost finely sifted. In the course of four or five weeks the plants will be up; I water them occasionally in a morning, and cover them down with a hand-glass in the evening. Towards the latter end of May, I transplant them into a border, where I allow them to remain for flowering the following spring. When they are in flower, I mark all the best flowers; and the '*pin-eyes*' (or those that show the pistilum) I throw away, for although they are generally the brightest colours, they are considered to be worth very little; those called '*moss-eyes*' (or those that show the anthers) are esteemed the best; the properties of a fine flower (which you have given at page 118) are very correct. I have seen several new and beautiful seedlings, which I understand are to come out next year.

Pitsmoor, July 27th, 1834.

JOHN REVELL.

ARTICLE III.—*On the Culture of the Dahlia.* By Mr.
JAMES JONES, Gardener, Ackworth, near Pontefract.

I herewith send for your acceptance an account of my method of growing Dahlias; but as others have said a great deal already on the subject, I shall be as brief as possible. In the first week in March, having a hot-bed ready, I put on the frame, and cover the bed to a depth of six inches with soil. I place my roots close to each other on the top of this earth, and cover them up with a coating of dry moss about three inches thick; I allow them plenty of air in the day time, if the bed be very hot. And when they first push out shoots I frequently sprinkle them with warm water. By the time the shoots are three or four inches long, they have generally formed new roots; this may be easily seen by removing the moss. I carefully take off with a sharp knife the shoots at all connected with roots, and pot them in sixties; these I plunge into the hot-bed again until they have formed strong roots, when I remove them into twenty-four sized pots, and let them remain in a cold frame until I plant them out. In the last week in May, which I consider quite soon enough, I plant them out three feet asunder, and in two or three weeks time I have the ground well forked over as deep as I can, taking care not to injure the young roots; the forking I repeat every month in dry weather.

I secure each plant with three stakes, placed at equal distances from the plant, about eighteen inches apart; I tie one of the strongest shoots to each stake, and secure the whole by tying strong tar band round all the stakes in different places according to the height of the plant.

In taking up the roots to keep through winter, care should be taken to choose a dry day, before the frost affects the leaves. I have found that they are preserved most effectually in barley-chaff; out of many hundred roots I have not lost half-a-dozen. By the above precautions I never fail to have a very plentiful show of fine flowers.

JAMES JONES.

Ackworth, June 17th, 1834.

ARTICLE IV.—*On the Culture of the Auricula.* By
A MIDDLESEX AMATEUR.

Being a subscriber and well-wisher to the success of your Magazine, I herewith send you the details of my mode of cultivating that beautiful spring flower, the Auricula—growing them, I consider, as well as any one. As I grow them merely for my own amusement, (having little else to do,) I have had leisure to try a variety of experiments, many of which I have found to answer *for a time*, but the following is what I can confidently recommend as most worthy of adoption.

My standing compost consists of three barrowfuls of fine yellow loam, two ditto two-year-old cow-dung, one ditto two-and-a-half-year-old night soil, and one peck of sea sand. The whole of these I mix together at least six months before I use it, turning it once a month. About the beginning of October, I make choice of an airy full-south aspect, and stand my pots on slates, placed at the bottoms of the frames. I expose them to all dry weather during the day, putting on the glasses at night; but at the beginning of April, I keep them on day and night, raising them a little behind during the day. When the plants begin to show bloom, I take great care in order to protect them from frost, for if they get in the least frosted, they will never blow flat. I add extra covering to them about the 20th of March, and continue it during their stay under the frame. When in bloom, I remove them to a northern aspect, where I let them remain till October.

Now as to potting, there is a diversity of opinions; but I pot them mostly in June or thereabouts. When potting, if there is any appearance of canker at the carrot root, I cut it off till soundness appears. If any of the plants appear in a poor dwindling way, the carrot stump ought to be closely examined, and a bit cut off; and if a black speck appears, it should be cut out: when this cannot be done, the plant usually dies. I am always careful to have a good drainage, putting an oyster-shell at the bottom of each pot, then some riddlings, and fill up with the compost. I then shake the pot twice or more on the board. After that, if the plants have not been cut much, I stand them in some tubs till the surface appears black, and then remove them to a shady place. I mostly earth my plants up about the middle of February, watering them

with a fine-rosed watering pot. I also let them have all the warm showers that fall, from the middle of February to the middle of March.

There are a few points I have not mentioned, as space will not permit; but, however, if you deem this worthy of a place in your extensively circulated Magazine, I shall forward you my method of raising seedlings, of which I grow a great many.

February, 1834.

A MIDDLESEX AMATEUR.

ARTICLE V.—*On Raising Plants of Double Stocks from Cuttings.* By OLITOR.

It has often been a matter of regret and mortification to others, no doubt, as well as to myself, that, in our endeavours to produce double flowers of the Stock by seminal propagation, we frequently, and unavoidably meet with disappointment.

Two years ago, the idea occurred to me of propagating this favourite by cuttings, from plants producing double flowers. The practice may not be new, but as far I am aware it is not common. I have practised two methods of taking cuttings, and with equal success in striking them, but I much prefer the one to the other, as I find the two methods produce very different plants; that which I consider the best, is to take the cuttings when the plants are in full bloom. On the side shoots producing the flowers, beneath the existing corymb, another—and frequently two other—shoots are produced; take off those shoots at their lower joint, before they show flower, with a sharp knife cut off the two lower leaves, insert them in pots half filled with any light, rich compost, and treat them as other soft wooded cuttings. When well rooted, pot them off in pots of sizes proportionate with the progress they have made, and they will make plants equal in symmetrical beauty to any raised from seed, and flower more abundantly. The idea of propagating Stocks from cuttings may at first sight appear tedious or tiresome, but it will not be found so in practice; besides, there are other advantages to be derived from it, which are not so strictly within our reach when propagating from seed, viz. the certainty of commanding groups of this lovely flower—all double, and the equal certainty of perpetuating any favourite or peculiar variety.

I am not particular about the compost I grow them in, as they will grow and flower well in any soil in common use ; but I have found from experience, that the fresher our soil the more healthy our plants, and the more brilliant the flowers they produce.

April 10th, 1834.

OLIVOR.

ARTICLE VI.—*On the Impregnation and Raising of Dahlias from Seed.* By INNOVATOR.

Several applications having been made for a system by which double Dahlias may be raised from seed with the least possible risk, I forward you my mode of cross-impregnating them. It matters but little what colours are blended, as two white flowers will produce them of all colours and shades ; but still I prefer getting them as opposite in this respect as possible, except where striped or picoteed flowers are required, in which case I should say, the nearer you get them alike, the greater will be your chance of success, as the preponderance will always be in favour of the breeder colour. In applying the pollen, (that is, the yellow dust always to be found in the centre of a full-blown flower,) I use a fine camel-hair pencil. The next thing is, where it should be applied. If your readers will draw out a petal from any bloom, and look into its very bottom, they will there see standing up a small brown-coloured point, called by botanists the stigma, or summit of the pistil, which are the female parts of generation in flowers. To this stigma they must apply the pollen with the brush, till completely covered. I should say, twelve petals are as many as should be inoculated in any single bloom, as they then produce finer seed than when too many are fructified. The third row of petals from the outside are those I prefer for this purpose. When the seeds are perfectly ripe, gather them, rub them out of the capsules, and keep them perfectly dry till the following March, when they may be sown upon a slight hotbed, covered by six inches of sandy soil, burying the seeds in this not more than half an inch. Protect them either by hand-lights or a frame from cold winds and night air till the middle of May, when they may be planted out to flower, which will not disappoint the cultivator, if first-rate flowers were selected as breeders. I have been trying

numerous experiments upon the expressed juice of Dahlia flowers in the hope of being able to produce a blue variety ; and I do not despair of success, as I have now a Lady Grenville nearly approaching it, being of a very blue ash colour, and a Lord Liverpool perfectly black. I would have sent you a detailed account of my experiments, but I am aware it would lead to such a correspondence as I have not time to attend to, at least not at present. At some future time, perhaps you may hear from me upon this subject ; but I do not promise, as it appears I am not endowed with the powers of communication, from the many explanations my Articles require to enlighten some of your readers. It is more than possible this will be my last ; and it should appear in your next, for the benefit of your subscribers. INNOVATOR.

August 5th, 1834.

ARTICLE VII.—*A Select List of Pansies.* By Mr. W. BARRATT, Nurseryman, Wakefield.

I am glad to learn, from a notice on the Cover of your far-famed *Floricultural Cabinet*, that very soon we shall be favoured with a fourth reprint of its earlier Numbers. I can assure you I am well pleased that so useful and cheap a publication meets with such deserved support ; but, at the same time, you must pardon me for saying, I am a little wearied with the frequent inquiries, "When shall we get our first Numbers of the *Cabinet*?" In the same Number, I also perceive, there is an inquiry (page 188) for a list of a few of the best sorts of Pansies ; and as I cultivate about 170 varieties, I have selected a few, and have attempted to class them, but I can assure you that it is a very difficult task ; however, it will enable those who are unacquainted with them to select with more certainty of getting a variety. If you have not received any other list, and should think my feeble efforts at all calculated to suit your correspondent, it is at your service, with my very best wishes for a further increase of prosperity to your interesting publication.

Bicolors, viz. those which are composed of two strikingly different colours.—Elizabeth, Barratt's Floribunda fragrans, Mr. Mapleton, Barratt's Odora, Lass of Richmond Hill, Sir F. Burdett.

Tricolors.—Earl Grey, Queen Bee, Lee's Favourite, Princess Victoria, Barratt's Mrs. Tottenham Lee, Barratt's Lady Kaye.

Edged ones, or such as have the upper petals edged with yellow, white, &c.—Jane Shore, Mrs. Drake, Silver Belted, Ma favorite, Mrs. Grimstead, Camelson, Othello, Duke of Northumberland.

Purple large flowers, but some having a little variety of colour in them.—Pluto, Shining Purple, Purple Tricolor, Grand Purple, Tippo Saib, Lady Bath, Louis Philippe, Blue Beard.

Dark—the upper petals dark, the lower ones spotted, or white, or yellow.—Mrs. Bolland, Giovanni, Reform, Prince George, William the Fourth, Barratt's Emperor, Commander-in-Chief, Miss Whitelock, Lady Ackland, Barratt's Lady Pilkington, Alfred, Mrs. Heywood, Mr. Hatfield, Barratt's Mrs. Simpson.

Ruby coloured.—Mrs. Ladbrooke, Amanda, Ruby, Copper Captain.

Spotted and striped.—Maculata, Barratt's Chancellor, Ajax, Barrattii, Lord Gambier.

Light coloured.—Grandiflora, Fair Rosamond, Blanda, Lady Grenville, Miss Douglas, Venus, Altaica.

Sky Blue, with various low petals.—Maid of the Mill, Warrior, Altaica, Tricolor major, Pallida, Lady Althorp.

Yellow, some of them spotted.—Lord John Russell, Mr. D. Gaskell, Lady Grey, Lady Oswald, Bang-up, Waverley, George the Fourth.

Changeable.—Weathercock, Phœbus, Barratt's elegans, &c. &c.

WILLIAM BARRATT.

Wakefield, August 1st, 1834.

ARTICLE VIII. — *On Plants which are peculiarly adapted for planting in Beds in Masses; each kind being showy and profuse in Flowering.* By FLORA.

Eschscholtzia californica, yellow.—Grows too feet high; blooms from June to September. The seed should be sown in pots in spring, and placed in a hotbed; when the plants are large enough, they may be transplanted into a bed of rich deep soil, where they will begin to bloom about the first of July; they will endure the cold of winter very well, if planted in a bed that has a dry substratum, or if the bed be raised a few inches higher than the surrounding ground. It is essential to their endurance of winter, that the roots

have a dry soil. The plants will bloom still more freely the second year. If required, they may be parted at the roots, and an increase of plants be easily obtained; and by this means they may be perpetuated from year to year. The time when I divide them is about the first week in April. Scarcely any plant produces a greater degree of splendour than this: when the full sun is upon it, it makes a complete blaze of colour. It is a most suitable plant for producing a distant effect. When it is planted out in a bed, it requires a considerable number of sticks for support, or the weak branches will be liable to lie close to the ground, and then the bloom is not so fine. If planted in single patches, they should have several sticks placed round, and a string fastened, so as to keep the flower-stalks tolerably erect: by this attention a neat and handsome effect will be given. I adopt the use of cross strings, as well as a circular one, by which means I have the shoots *regularly* disposed.

Calandria grandiflora.—Grows two feet high; blooms from June to October. The seed should be sown in pots early in spring, and placed in a hotbed. When the plants are large enough to transplant, they should be planted off into small-sized pots, which should be well drained with potsherds, as this plant is very susceptible of injury from damp. The soil should be a rich loam, with a portion of sand; it should not be sifted fine, but be well broken with the spade. The plants should be placed in a frame, or other situation where they can be forwarded. About the first week in May, a bed of rich soil, mixed with sand, should be prepared. Care must be taken to have the bed elevated, so that the surface be four or six inches above the level of the adjoining ground; and the surface should be slightly rounded, so as to allow any excess of water, from heavy showers, to pass away. Unless this precaution be attended to, the plants will most probably perish, unless an awning of canvass covering be used to prevent it. The plants should be turned out of the pots with balls entire, and placed a foot or more apart. If it be wished that their flower-stems should rise to their highest extent, (*viz.* two feet,) they may be placed a foot apart; but when it is desired to keep them lower, they should be planted more distant, in proportion to their prostration. The plant is very well adapted for covering a bed only a few inches high, the branches naturally inclining to grow

horizontally, or even pendulous. Considerable care is required to keep them well secured, by tying, &c., in consequence of the shoots being succulent, and very brittle. When watering is required, none should be given to the heart of the plant, but it should be poured over the surface of the bed. To provide against accidents that may arise, it is advisable to have a few plants kept in pots, in order to replace deficiencies. If a bed is required to bloom profusely at a late period of the summer, or even in autumn, seed should be sown at the end of May, or early in June, and the plants treated in every respect as above directed. The plant produces seeds in abundance, but it requires some attention to get it before the capsule bursts. The plants may be taken up and preserved during winter in a cool, dry frame. In spring, they may be increased by pinching off the leading shoot, thereby causing the production of laterals, which being carefully taken off, may be struck; or the main stem, down to the root, may be divided, so as to have a shoot to each part. To get them to strike well, a hot-bed frame, or stove heat, will be found useful. When the fine rosy lilac flowers of this very beautiful plant are fully expanded, being produced in vast profusion, and continuing for so long a season, they make a very pleasing appearance, and never fail to give ample satisfaction.

Nieembergia phanicea. Syn. *Petunia violacea*.—This plant is one of the most valuable additions to the flower garden, and with which all admirers of flowers must be pleased. It will bloom constantly in the open border from May to the end of October; and the fine rosy purple flowers being produced in vast profusion, render the plant a most pleasing object. When allowed to grow upright, and carefully trained, it will rise to six or eight feet high, or even more, and be liberally furnished with lengthened lateral branches. The plant is readily raised by seed, which should be sown in a pot early in spring, and placed in a hotbed frame. When strong enough, the plants should be transplanted into small pots, using a rich soil; and by the end of May, they may be planted out in the open border. Such plants will rarely rise higher than three feet the first season, but will produce a vast number of side shoots, and bloom abundantly. At the end of October, the old plants, if taken up with care, may be kept in a greenhouse through winter. About the end of September, slips should be

taken off, and struck in heat, which they do very freely ; ten or twenty may be inserted in a pot, and after having taken root, they may be kept in a cool greenhouse, frame, or any similar situation, during winter. If large plants are desired, some of the cuttings should be potted off at the end of February, using a rich loamy soil, and well draining the pots. Each plant should have a stick, to which it should be neatly tied, keeping a principal leading shoot. These plants, when properly attended to, in repotting as soon as required, and in training erect, will, if kept in a greenhouse, reach three or four feet high by the end of May ; and if then planted out, will reach six feet, or more, by the end of summer. Old plants, that have survived the winter as above directed, if turned out, will be proportionably fine. A bed of this plant looks well, when the plants are so ranged as to form a cone ; or, indeed, in any shape in which the middle of the bed is the highest, gradually lowering to the edges. The plant is admirably well adapted for pegging down to the ground, the lateral shoots rising from six inches to a foot high. The leading shoots being prostrate, checks luxuriance, and causes abundance of bloom. Cuttings taken off in autumn are very suitable for this purpose : they readily bend to the direction desired. Care is required to have a number of short sticks pricked in the bed, to which the shoots, in the early part of the season, must be tied, being very brittle ; subsequently, however, when there is an abundance of shoots, no tying will be required, but the sticks are necessary, in order to prevent strong winds from blowing the plants out of proper form. This plant is also admirably well adapted for training against a wall, or for covering a fence during summer : of course proportionably sized plants must be used to suit the purposes. The flowers of the original species has a dark-coloured tube, but a variety has been raised with a lilac tube : the former is now commonly called *N. phænicea*, and the latter *N. phænicea var. pallida*.

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

Ladies' Botany; or a Familiar Introduction to the Study of the Natural System of Botany. By JOHN LINDLEY, Ph. D., F.R.S. &c. &c. &c., Professor of Botany in the University of London. 8vo. 302 pages, 25 plates. London, 1834. 16s. plain, £1 1s. coloured.

We feel sorry that we have not room this month to make those observations upon the work before us, that we otherwise should have done. But we have much pleasure in stating, that in illustration of the *Natural System of Botany*, the work is unequalled, and each particular is treated in the most satisfactory manner; in fact, like all the other works we have read from the pen of Dr. LINDLEY, it is done in the most masterly manner. Every person desirous of acquiring a knowledge of the *Natural System of Botany* ought to possess Dr. LINDLEY's Work.

Plants figured in the following Periodicals for August :—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured ; 3s. plain.

1. *Schinus molle*, Peruvian Mastic Tree. Class, Diacæa; order, Decandria. Natural order, Terebinthaceæ. This plant, the *Molli* or *Molle* of the Peruvians, grows wild not in Peru only, but also in Mexico, according to some authors, where it inhabits dry and sandy places: it is likewise found in Chili, unless the specimens I have received from that country are cultivated plants. If not possessed of much beauty in the flowers, (which, however, are rarely produced in our collections,) the *Molle* yields to few trees in the gracefulness of its foliage: added to which, its properties and uses are well deserving our attention. Flowers of a pale yellow green. *Schinus*, from the Greek *Schinos*, the ancient name of the Mastic Tree; and this is known by the same name in Peru.

2. *Coleonema pulchrum*, Beautiful Coleonema. Pentandria, Monogynia. Rutaceæ. The present graceful and beautiful plant is no doubt a native of the Cape of Good Hope, and has long been cultivated in the greenhouse of the Botanic Garden of Glasgow, under the name of *Diosma angustifolia*, a name, however, only of the gardens, and implying a character common to others of the genus. It flowers in April and May, and deserves a place in every collection, from its graceful mode of growth, and bright and conspicuous rose-coloured blossoms, which continue long in perfection. *Coleonema*, from *koleos*, a sheath, and *unna*, a filament,—from the groove in the claw of the petal in some species, in which the sterile filament is partly lodged.

3. *Acacia hastulata*, Little Halbert-leaved Acacia. Polygamia, Monœcia.

Leguminosæ. This very singular and distinct species was discovered by Mr. MENZIES, in King George's Sound; and, in the same country, by the late Mr. FRAZER, whence he sent seeds to the Glasgow Botanic Garden, at which place it flowered in the greenhouse in 1834. The flowers are produced in globose heads, of a lemon colour; they are delightfully fragrant, smelling like Hawthorn. *Acacia*, from *akazo*, to sharpen; many species thorny.

4. *Silene Virginica*, Virginian Catchfly. Synonym, *Lychnis coccinea*. **Decandria, Trigynia.** Caryophyllæ. The plant grows about 18 inches high, nearly smooth, and panicked above. The flowers are of a fine light scarlet, more than an inch across.

5. *Iris tenax*, Tough-leaved Iris. **Triandria, Monogynia.** Iridæ. This interesting plant is stated by its discoverer to be a common plant in North California, and along the coast of New Georgia, in dry soils or open parts of woods, flowering in April and May, the same season that it does with us when kept in a cool frame. Mr. DOUGLAS gave it the appropriate appellation of *tenax*, because the native tribes about the Anguilac River make a fine cord from the fibres of the leaves, of which they weave their fishing-nets, a purpose to which it is admirably suited, on account of its buoyancy, strength, and durability. Snares are made of it for deer and bears, of such strength, that one not thicker than a sixteen-thread line is sufficient to strangle the great stag of California (*Cervus Alces*), one of the most powerful animals of its tribe. It has been recommended for cultivation by Professor LINDLEY in England, (where it proves perfectly hardy,) as better suited to our climate than the famous *New Zealand Flax*. Flowers of a reddish purple, solitary.

6. *Alstræmeria oculata*, Eye-marked Alstræmeria. **Hexandria, Monogynia.** Amaryllidæ. Various species of this elegant and beautiful genus abound in South America, especially on the side next the Pacific. The present species can boast of flowers which, though perhaps the smallest of the genus, are among the most desirable for gracefulness and beauty, and remarkable for the eye-like spots in the centre of each inner petal. Flowers reddish, white centre, surrounded by a purple band. It appears to have been first discovered at Valparaiso, by Mr. CUMING. *Alstræmeria*, from Baron C. ALSTRÆMER, a Swedish botanist.

7. *Caladium grandifolium*, Large-leaved Caladium, or Indian Kale. **Syn. Arum grandifolium.** **Monœcia, Polyandria.** Aroidæ. This plant makes a truly handsome appearance, with its climbing and rooting stems, its large foliage, and pale buff spathas with a dark red line down the middle on the back. It flowered in the Glasgow Botanic Garden in April last; the plant came from Demerara.

Edwards's Botanical Register. Edited by Dr. LINDLEY, Professor of Botany in the University of London. Price 4s. coloured; 3s. plain.

1. *Gilia coronopifolia*, Raven-footed Gilia. **Pentandria, Monogynia.** Polemoniaceæ. This very handsome plant is a native of Carolina. Although the plant is delicate, it is tolerably easy to cultivate, and produces seed in abundance. It is called in the French gardens, *Ipomopsis picta*.

2. *Ribes niveum*, White-flowered Gooseberry. **Pentandria, Monogynia.** Grossulacæ. An undescribed Gooseberry, brought to the Horticultural Society by Mr. DOUGLAS, from North-west America. It is nearly allied to the common European Gooseberry, from which it is distinguished by its long conical stamens. The fruit is about the size of that of a Black Currant, and of the same deep, rich purple colour; it has altogether the appearance of a small smooth gooseberry, but its flavour is very different. It is entirely destitute of the flatness which is more or less perceptible in even the best gooseberries, in lieu of which it has a rich sub-acid vinous, rather perfumed flavour, which is extremely agreeable. The fruit is rather too acid to be

eaten raw, but when ripe it makes delicious tarts, and would probably form an excellent means of improving the common gooseberry by hybridizing.

3. *Diplopappus incanus*, Hoary Diplopappus. Syngenesia, Polygamia Superflua. Compositæ. A handsome half-shrubby species, discovered in California, by Mr. DOUGLAS, by whom seeds were sent to the Garden of the Horticultural Society, in 1832. Its flowers are of a rich lilac, with a bright yellow disk. It is rather tender, and should be protected during winter in a frame. In summer it grows freely in any hot, exposed situation, for which its Californian constitution particularly qualifies it. Diplopappus, so called in allusion to the double row of papus of the genus.

4. *Pullenæa flexilis*, Shining-leaved Pultenæa. Decandria, Monogynia. Leguminosæ. A native of the country around Port Jackson, where it flowers in the spring (Sept.); and according to Dr. ROXBURGH, has been an occasional inhabitant of the English gardens for upwards of thirty years.

5. *Dendrobium aggregatum*, Clustured Dendrobium. Gynandria, Monandria. Orchidæ. Received, according to Dr. ROXBURGH, into the Botanic Garden, Calcutta, from Mr. PIERARD, who found it growing on the trunk of *Lagerstræmia Regina*, on the northern border of Arracan, and observed it in the woods exclusively on that tree; it was, however, found to thrive on the Mango tree, in the Botanic Garden. It is also a native of the banks of the Chappadony river, in the Gulph of Martaban, whence it was brought, some years since, by Dr. WALLICH. It appears to require as much heat and moisture as any of the Indian species, a circumstance which is explained by its inhabiting, when wild, the damp and sultry woods of Martaban. We believe it was originally distributed by the Horticultural Society; but it has hitherto flowered only in the cultivation of Mr. HARRISON and Mr. BATEMAN, from both of whom we have received specimens, and blossoms in March and April.

6. *Phacelia tanacetifolia*, Tansy-leaved Phacelia. Pentandria, Digynia. Hydrophyllæ. This is a more elegant and less weedy plant than the *P. circinalis*, now common in gardens. It is a hardy annual, thriving in any soil or situation, it grows two feet high. The flowers are of a light bluish violet colour, nearly sessile along one sided spirally incurved racems, forming together a dense dichotomous panicle placed at some distance from the upper leaves. A native of California, where its seeds were gathered by Mr. DOUGLAS. Phacelia, from *phakelos*, a bundle; in allusion to the flowers being collected in close parcels.

7. *Stachys inflata*, Bladdery Stachys. Didynamia, Gymnospermia. Labiatæ. This plant was raised in the garden of the Horticultural Society; it is apparently hardy, and grows freely in any common garden soil, and is easily propagated by cuttings. Although not a very handsome plant, yet its thin half transparent light violet flowers, and neat hoary leaves give it a pleasing appearance.

8. *Erica codonodes*, Bell-bearing Heath. Octandria, Monogynia. Ericæ. This species of Heath has the general appearance of *E. arborea*, but it seems essentially distinct in its larger flowers, more slender leaves, less hoary branches, and truly bell-shaped corolla, which has by no means the globular form of that of *E. arborea*. It is quite hardy, and forms a bush from 10 to 12 feet high. It begins to blossom in February, and continues till the end of May, disregarding both frost and snow, being often covered with flowers from top to bottom, and forming a most beautiful object. It thrives in light sandy peat, and is increased, but with difficulty, either by cuttings struck in sand under a bell glass, or by layers bent down in July.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s.; plain,
2s. 3d.

1. *Moræa tricuspis*; VAR. *ocellata*; Trident-leaved Moræa. Triandria, Monogynia. Iridæ. This very elegant variety, which is not surpassed in
VOL. II. 2 E

beauty by any of its congeners, has been regarded as a species by DE CANDOLLE, SPRENGEL, and others, but we can perceive no difference, except colour, whereby to distinguish it from *tricuspis*, to which in our opinion it has been very properly united by JACQUIN, THUNBERG, and KER. It is a mistake to suppose, that to cultivate the Cape Irideæ, a greenhouse is necessary; all that they require is protection from frost, and this can best be done by a frame, which may be removed entirely in fine weather. A warm sunny border should be selected for their culture, and the earth removed to the depth of a foot or 18 inches, and replaced by a mixture of vegetable mould and river sand. The bulbs should be taken up in the autumn, and replanted about the middle of January, the larger ones being carefully selected from the rest. The earth will require to be renewed every two or three years.

2. *Lophospermum Rhodochiton*, Purple Lophospermum. Didymia, Angiospermia. Scrophularine. Seeds of this beautiful new climber, was lately received into this country from the Royal Botanic Garden, at Berlin. A plant flowered in June last, in Mrs. MARRYAT's collection, at Wimbledon. The corolla is funnel-shaped, of an intense purple, an inch-and-a-half long, clothed with white glandular hairs. The plant requires the same treatment as *L. erubescens*.

3. *Diapensia lapponica*, Lapland Diapensia. Pentandria, Monogynia. Polemoniaceæ. This plant was raised at the Botanic Garden, Edinburgh, from seeds gathered on the Rocky Mountains, North America, by Mr. DRUMMOND, in the last expedition of Captain FRANKLIN, and flowered in April, having been kept in the open borden, and occasionally covered with a hand-glass.

4. *Campanula garganica*, Garganian Bell-flower. Pentandria, Monogynia. Campanulaceæ. This pretty little Campanula was discovered by Professor TENORE, on Mount St. Angelo, anciently Garganus, in the Kingdom of Naples, and named by him after that locality to which it appears to be peculiar. It was raised in the Bishop of ROCHESTER's garden, at Bromley, from seeds sent to Miss MURRAY, from Naples, by the Honourable WILLIAM T. H. FOX STRANGWAYS, and thence plants have been liberally distributed to various collections. The plant is admirably adapted for a rock-work, and appears to thrive best in a mixture of peat and loam. It is readily increased by division.

On the different Modes of Budding; and of Herbaceous, or Summer Grafting. Translated, with some additions and variations, from *l'Horticulteur Belge*.

(Extracted from the *Gardener's Magazine* for July, 1834.)*

I. BUDDING. *Greffes par Gemmes.*

1. *Escutcheon Budding, without a Bud or Eye; Greffe en Ecusson sans Yeux.* (fig. 1).—The object of this mode of budding is simply to cover a

wound or blemish in one tree by the live bark of another. Take from a tree of the same sort, or at least of the same genus, as the wounded tree, a piece of bark rather larger than the wound, and form it into a regular shape; then cut the bark round the wound into the exact form and dimensions of the piece to be inserted, so that the latter may be let into the former with the greatest exactness. The inner bark of the graft and that of the stock being fitted so as to joint perfectly all round, and the shield closely adhering to the tree in every part, it is kept on by a ligature; and the edges of the wound are covered with grafting-wax or clay. It is a remarkable fact, which some are, perhaps, not aware of, that the wood

formed under a piece of bark inserted in this manner, even though that bark be without a bud or eye, will be the wood of the tree from which the shield

[* Since reading this Article in the "*Gardener's Magazine*," we have procured the original Work, and intend giving other extracts from it in subsequent Numbers.—COND.]

was taken. In this way several kinds of wood might be formed on one tree, without introducing a single leaf belonging to those different woods. The portion of wood introduced will always be limited in diameter to the size of the portion of bark put on.

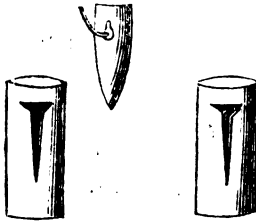
2



2. Budding with a Bud or Eye, and a circular Escutcheon; Greffe en Ecusson par Inoculation. (fig. 2.)—With the point of a grafting-knife, or rather with that of a penknife, cut a small bud out of the tree to be propagated, leaving a narrow rim of bark round it, and taking, at the same time, a portion of the wood, which is retained. A hole is made in the stock, of the same size as the bud and its rim, and of a depth equal to the length of the piece of wood left on. The whole is adjusted so that the bud, with its bark and wood, fills up the wound exactly; and the edges are then covered with grafting-wax. This mode of budding is employed to equalise the flower-beds over a tree, by removing some, from where there are too many, to those parts of the tree where there are too few.

3. Escutcheon Budding, with Wood under the Bark; Greffe en Ecusson boisé. (fig. 3.)—To procure the escutcheon, a deep and transversal incision

3



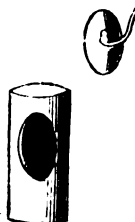
is made above a healthy and vigorous bud; then, by withdrawing the blade of the grafting-knife, and entering it rather higher than this cross cut, a narrow strip of bark, three or four lines broad, by 1 in. or 1½ in. long, is taken away, terminating in a point at the bottom. The eye should be situated about a third from the top, and the stipules or other appendages that sometimes accompany the petiole, as well as prickles, &c., must be taken off with caution. With the point of the grafting-knife, the wood of the escutcheon is then taken out, leaving a small piece immediately under the eye, and about a third of the length of the escutcheon. The bud, thus prepared, is inserted in the stock, and then tied as before. This mode of budding is that most generally used in European nurseries.

4. Escutcheon Budding, with a growing Bud; Greffe en Ecusson avec un Œil poussant.—The escutcheon is cut and placed in the same manner as by the preceding method; but, as soon as it is inserted, the head of the stock is cut off, and all the buds that push from it, except that from the escutcheon, are rubbed off as they appear. This mode of budding, when done in the spring, has the great advantage of forcing the bud to develop itself immediately, thus gaining a year. However, it sometimes happens that, if the bud does not take, the sap of the stock not being able to find a channel, from all the shoots being rubbed off as they appear, the stock, or at least a great part of its length, dies of repletion. When done in the month of August, this mode of budding seldom succeeds, because the young shoot, not having time to ripen, perishes with the frost, and often causes the death of the stock.

5. Escutcheon Budding, with a dormant Bud; Greffe en Ecusson avec un Œil dormant.—This mode is similar to the preceding; but it is performed in August, and nothing is cut away from the stock till the following spring, in order to prevent the development of the bud before that season. Though longer before it takes effect, this mode of budding is more certain to succeed than the preceding method. It has also the merit of not hurting the stock, if it does not take. The inhabitants of Vitry, who carry on the greatest commerce in fruit trees in the neighbourhood of Paris, use it almost exclusively. This mode is that generally used in the British nurseries.

6. Escutcheon Budding, without the Wood; Greffe en Ecusson dénué de Bois.—According to this mode, all the wood is taken away except a speck immediately under the bud; to the life of which bud, however, that speck is essential. The rest of the process is as usual. Besides being very suitable for Orange trees, this mode of budding is used for all trees having hard wood, such as Myrtles, Hollies, and all analogous species, whether indigenous or exotic. It can be done either with the growing bud or dormant bud.

4



7. *Escutcheon Budding, with Pincers ; Greffe en Ecusson à Emporte-pièce. (fig. 4.)*—A pair of pincers ought to be made on purpose, with which a piece of bark is taken off the stock. With the same instrument, or with the blade of the grafting-knife, an escutcheon or plate of bark, having a vigorous eye in its centre, is taken off a young shoot of the tree to be propagated. It must be exactly of the same size as the wound made in the stock, in order to fill it with the greatest precision. When it is properly fixed, it is supported by means of grafting-wax or soft wax. This method is excellent for budding old trees, the thick and rugged bark of which is not suitable for the ordinary modes.

8. *Escutcheon Budding, with the Eye turned downwards ; Greffe en Ecusson à Rebours.*—The escutcheon is cut in such a manner that the point of the eye, when placed on the stock, is turned downwards, whether the incision in the stock is made in the usual manner, or like a T reversed, thus, L. By this method, the buds are forced to grow in a direction opposite to that which they would have taken naturally; but they soon resume their usual position; and the desired end, viz., that of increasing the size of the fruit by stagnating the returning sap, is thus by no means attained.

9. *Reversed Escutcheon Budding ; Greffe en Ecusson renversé. (fig. 5.)*—

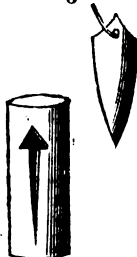
5



The escutcheon is prepared in the form of a triangle; but instead of bringing it to a point under the eye, it is pointed above it. It will be perceived that the incision in the bark of the stock must be also reversed; that is to say, instead of being in the form of an upright T, it must be like a T turned upside down, as in the figure. To effect this, the longitudinal incision is made above the transversal one, instead of making it below it. It is finished with ligaments and grafting-wax, as the preceding modes. In comparatively cool and moist climates, like that of Britain, the grafting-wax may be dispensed with in such cases as this and the three or four preceding ones. This manner of budding is almost the only one used in the south of Europe, particularly at Genoa and at Hières, to multiply Orange trees. It is also suitable for the propagation of trees having abundant and gummy sap; and it might probably be advantageously employed to secure the success of buds on resinous trees.

Orange trees. It

6

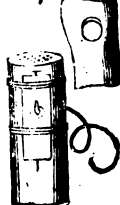


10. *Budding resinous Trees ; Greffe en Ecusson d'Arbres résineux. (fig. 6.)*—An incision is made in the form of T, as if for an ordinary bud, in the bark of the stock. A double incision is then made obliquely, about two lines or two lines and a half from the upper part of T: this incision should penetrate the bark to the thickness of nearly a line, or so as to reach the soft wood. This mode of budding succeeds not only on resinous trees, but also on all those that have a gummy and very abundant sap.

11. *Covered Budding ; Greffe en Ecusson couvert. (fig. 7.)*

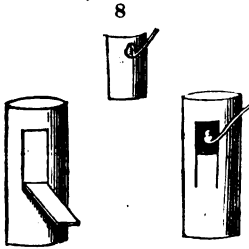
—The bud is prepared as usual; but, when it is inserted in the stock, instead of a ligature, the lines of junction are covered with grafting-wax: a piece of bark is then taken from another tree, and, a small hole being made in the middle of it, it is placed on the escutcheon, so as to cover the whole of it except the bud, which appears through the hole, as in the figure. A bandage is then put over the bark, to keep the whole together. This mode of budding is rather too intricate for ordinary purposes; but it may be worth adopting for rare and delicate trees.

7



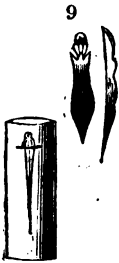
12. *Budding with a square Escutcheon ; Greffe en Ecusson carré. (fig. 8.)*—Three incisions are made in the stock, one

transversal, and the two others longitudinal, beginning on each side of



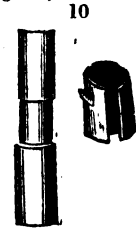
bark, which was hanging down on the stock, is raised, and the escutcheon covered up to the eye; the line of junction is then coated with grafting-wax, and the whole is tied like other buds. It appears that this mode of budding was much used formerly, and that it succeeded perfectly: but, as it is rather tedious in the execution, it is now seldom employed.

13. *Escutcheon Budding, with a Portion of Terminal Buds; Greffe en Escusson par Portion d'Yeux terminaux.* (fig. 9).—A piece, measuring six or eight



lines in length, cut from the top of a branch, is split in two, dividing the terminal bud exactly in the middle. An incision is then made in the stock in the form of a T, and the half bud is inserted into it in the usual manner. In case of need, the terminal eye might be divided into four equal parts. The growing bud ought to be used to insure success, though this mode will sometimes succeed with a dormant bud. This method may be very useful, if the tree to be propagated has no young side shoots strong enough to admit of a bud being taken from them. It is particularly suitable for rare trees, with scaly buds and opposite branches.

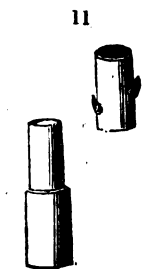
14. *Annular Flute Budding; Greffe en Flûte en Anneau.* (fig. 10).—A branch is chosen on the tree which is to be propagated, as thick as, or thicker than, the stock, and a ring of bark, including



an eye, is cut from it, and detached by splitting it perpendicularly on one side, and then separating it from the wood by inserting under it the spatula-like handle of the budding-knife. A similar operation is then performed on the stock; that is to say, a ring of bark, exactly of the same size, is detached from the stem in the same manner, but without caring whether there are buds on it or not. In its place is put the ring taken from the branch to be propagated, with the precaution of making the inner barks join together exactly both at top and bottom. No binding is applied; but the whole is covered with grafting-clay (*onguent de St. Fiacre*) or grafting-wax. Neither the branches nor the head of the stock are to be cut down till the bud has taken. The two periods most favourable for this sort of budding are, the time of the greatest movement of the sap in the spring, and at the end of its greatest movement in August. This mode of budding has the advantage of never mutilating the stock; because, if it does not take, the bark of the ring supplies the place of that taken away. It is not only suitable for the propagation of Walnut trees, but also for the increase of all rare trees with hard wood, such as the American Oaks and Chestnuts.

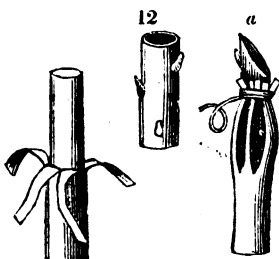
15. *Split Flute Budding; Greffe en Flûte fendue.*—The only difference between this and the preceding mode is, that, if the ring of bark containing the bud is larger than the space prepared for it on the stock, a piece must be taken from it longitudinally, so as to make it fit exactly.

16. *Flute Budding by close Contact, Tube Budding; Greffe en Flûte par Juxtaposition, ou en Sifflet.* (fig. 11).—The head of the stock being cut off, a ring of bark, 2 in. or 3 in. long, is removed. A shoot is then taken from the tree to be increased, of exactly the same thickness as the stock, and a ring



or tube of bark is taken off the thick end, without being split longitudinally, not quite so long as the piece of bark taken off the stock, but provided with two or three good eyes. The tube thus formed is placed upon the stock in the room of the one taken away, and care is taken to make the two edges of bark join below. The part of the stock which projects over the ring of bark is next split into shreds, and brought down over it all around, so as, when secured by grafting-clay, to keep it in its place. This mode of budding is chiefly employed in the south of France for propagating Walnuts, Chestnuts, Figs, Mulberries, and other trees with thick bark and abundant pith.

17. *Common Flute Budding ; Greffe en Flûte ordinaire.* (fig. 12).—The head of the stock is cut off; but, instead of removing a ring

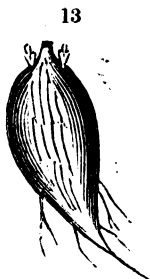


of bark, as in the preceding mode, it is cut longitudinally into four or five strips, and turned down as in the figure, being left still attached to the tree. From a shoot of the tree to be propagated, a tube of bark is taken, furnished with four or five eyes, rather shorter than the strips, though longer than in tube budding. When the tube of the scion is slipped on the stock, the strips of bark are raised over it, and fastened at the top by a ligature. This method of budding is in very general use both in France and Germany.

18. *Flute Budding in Shreds, with the Stock cut obliquely ; Greffe en Flûte et en Lanière.*—This is nothing more than the mode above described, with the end of the stock cut obliquely, as shown at *a* in fig. 12, instead of being left to be afterwards cut into shreds and turned down over the tube of bark, as in tube budding, No. 16, fig. 11.

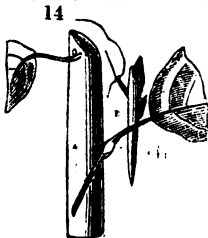
II. HERBACEOUS GRAFTING. *Greffe Herbacée.*

1. *Grafting upon fleshy or tuberculous Roots ; Greffe sur Racines charnues ou turbaculeuses.* (fig. 13).—It not unfrequently happens that a tubercle of



a Georgina root is found without eyes; and, when this is the case, notwithstanding all the care of the cultivator, it may remain in the ground one or two years without budding, till at last it rots. This imperfection is easily discovered if the neck of the tuber is looked at attentively, for it is always there that the buds are found. In this case, as soon as a Georgina bud upon some other tuber has begun to germinate, it is picked out with the point of the grafting-knife, and is taken away with a small piece of the tubercle adhering to it. On the neck of the barren tubercle a small hole is made, in which the bud is inserted, but in such a manner as that the base of the bud shall be perfectly on a level with the surface of the tubercle; and it is cemented

with grafting-wax. The tubercle is then planted in a pot, taking care not to cover the neck on which the graft is, and the pot is plunged in a hot-bed under glass. When the graft has taken properly, the plant is turned out into the open border.



2. *Herbaceous Furrow-Grafting for vertical Shoots ; Greffe herbacée en Rainure pour les Omnitiges.* (fig. 14).—A bud with a triangular slice of bark and wood, when in a soft or herbaceous state, is cut out of the scion, and inserted in a corresponding groove made in the stock, as shown in the figure; a ligature is applied, and afterwards grafting-wax. This mode of grafting succeeds both with the young wood of trees and with herbaceous plants, whether perennial or annual. M. TSCHOUDY gave the arbitrary

name of *omnitiges* to those plants, all the shoots of which have an equal tendency upwards, and which, of course, are all equally suitable to graft upon.

3. *Herbaceous Grafting for Shoots with opposite Leaves; Greffe herbacée pour les Bourgeons à Feuilles opposées.* (fig. 15.)

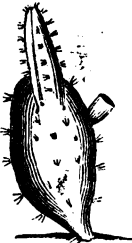


In the middle of the stem, between two opposite eyes, an angular and longitudinal incision is made, traversing the stem from one side to the other. The graft is cut angularly at its top and bottom, and it is inserted as in the figure. The binding, &c. is then put on as usual. This mode of grafting is suitable for those species of trees, and annual or perennial plants, the buds of which are opposite on the stem, which happens most frequently on the central shoots of plants. M. TSCHOUDY gives the name of *multitiges* to those plants, the central shoots of which have a tendency to rise more vertically than the lateral ones, and which have consequently more vigour: it is upon these central shoots that the grafts ought to be made.

4. *Grafting on the Stem of Annual or Perennial Plants; Greffe sur Tige de Plantes Annuelles ou Vivaces.* (fig. 16.)—The period chosen for this mode of grafting is that of the greatest vigour of the plant, that is, some days before its going into flower. The stem of the stock is cut through above a leaf, as near as possible to its petiole, and a slit downwards is made in the section. A shoot is then taken off near the root of the plant to be increased, the end of which is cut into a wedge shape, and is inserted in the slit made in the stock, taking great care of the leaf on the latter; for it is that which must nourish the cion until it has taken thoroughly, by keeping up the circulation of the sap. A bandage is applied, and the junction covered with grafting-wax, as before. When the graft is taken, which is ascertained by its growth, the ligature is removed, and the old leaf, and the shoots from the stock below the graft, are removed. M. TSCHOUDY grafted in this manner artichokes upon cardoons, and other plants on their congeners.



17



5. *Grafting on Succulents; Greffe des Plantes Grasses.* (fig. 17.)—Take a young shoot or leaf of a succulent plant (for example, of a cactus or opuntia,) and, cutting its base to a point or wedge, insert it in a hole or slit made in the stem or leaf of another species, but of the same genus.

6. *Grafting the Melon; Greffe du Melon.* (fig. 18.)—On the stem of a cucumber, or any other plant of the family of Cucurbitaceæ, but having some analogy with the melon, choose a vigorous part of a shoot having a well-developed leaf. In the axil of this leaf an oblique cut is made, of half its thickness. The point of the melon shoot, so far developed as to have its fruit quite formed, is then cut off, and pointed at its end, 2 inches below the fruit. It is inserted in the cleft made in the stock, always taking care to spare the leaf until the cion has taken. The remaining part of the operation is performed in the usual manner with ligatures and grafting-wax. This mode of grafting succeeds pretty well; but it has not hitherto been applied to any useful end. Tomatoes may be grafted in this manner on potatoes, and it is said that potato plants thus treated produce



good crops both of potatoes and tomatoes.

Grafting-wax may be formed with turpentine, bees' wax, rosin, and tallow.

QUERY.

ON CARNATIONS.—Amongst the many valuable observations in your excellent little work, on the culture of this beautiful flower, I do not meet with any remark which affords information and advice on the subject of their suddenly withering and dying at this time of the year. In September last I purchased several pairs of different eminent Florists, and when they reached me, I thought I had never seen any looking more healthy and fresh; during the winter months I adopted the course recommended by your Correspondent, INNOVATOR; in April last I potted them in pairs into the flowering pots, and until a fortnight since no layers could possibly present a more promising appearance, when much to my surprise not less than half a score of them rapidly withered and died; they had been regularly watered twice a week with soft water. On examining the stems, I found them all decayed immediately below the surface, and but little increased in roots, the mould, not as I expected, containing worms or slugs. The first time I observed the change, I followed INNOVATOR's advice by watering them with linewater, but it was all to no purpose; and one most remarkable fact is, that in one or two instances, only one plant in a pot died, the other continuing perfectly healthy. If they had all been affected in pairs, I should have suspected the compost: such, however, I am satisfied was not the cause; and that plants apparently so healthy, and in such an advanced stage, attended with every possible care, should so suddenly die, is to me at present unaccountable, and certainly a great disappointment; if, therefore, INNOVATOR, or any of your experienced Correspondents, will oblige me with a few observations on the subject, I can assure you it will be conferring a particular and general favour, as I hear many of my neighbours have experienced the same misfortune, and are equally at a loss.

C. W. J.

22d June, 1834.

REFERENCE TO PLATE.

1. *Grandissima Pelargonium*. Monadelphia, Heptandria. Geraniaceæ. A new and very handsome sort, grown by Mr. WIDNALL, florist, Grantchester, near Cambridge, and several other nurserymen in the neighbourhood of London. It requires the same treatment as the other varieties.

2. *Fuchsia Robertsii*, ROBERTS'S FUCHSIA. * Octandria, Monogynia. Onagrafiæ. This truly splendid Fuchsia was raised by Mr. JOHN ROBERTS, Gardener to J. H. TREYMAINE, Esq. at Heligan, near St. Austelle, Cornwall, from whom we received specimens from whence our drawing was taken.—Mr. ROBERTS informs us that "it is planted out in the open ground, and is now (June 1834) five feet high, spreads fifteen feet in circumference, and is loaded with flowers." It appears to be a vigorous growing plant, having been, as we understand, a small plant in the spring of 1833, when it was turned out into the open border.

FLORICULTURAL CALENDAR FOR SEPTEMBER.

PLANT STOVE.—(See last month's directions.)

GREENHOUSE PLANTS.—All the tender plants belonging to this department should now be taken into their winter habitation, giving them a plentiful supply of air night and day, if the weather will allow it; also, particular attention must be paid to watering: the hardiest kinds may remain out till the middle or latter end of the month at the latest.

FLOWER GARDEN, &c.—Towards the end of the month, Tulips, Hyacinths, Crocuses, &c. may be planted for *early* spring flowering in pots of light soil, (see the article in the March number), and also in borders. Pinks should now be transplanted into beds for flowering, and kept well supplied with water till they have taken root. Carnation layers and pipings should now be potted. Auriculas should be duly attended to with water. Dig and prepare nursery beds for planting biennial and perennial plants sown in spring.—Still propagate fibrous rooted perennials by slips, &c.

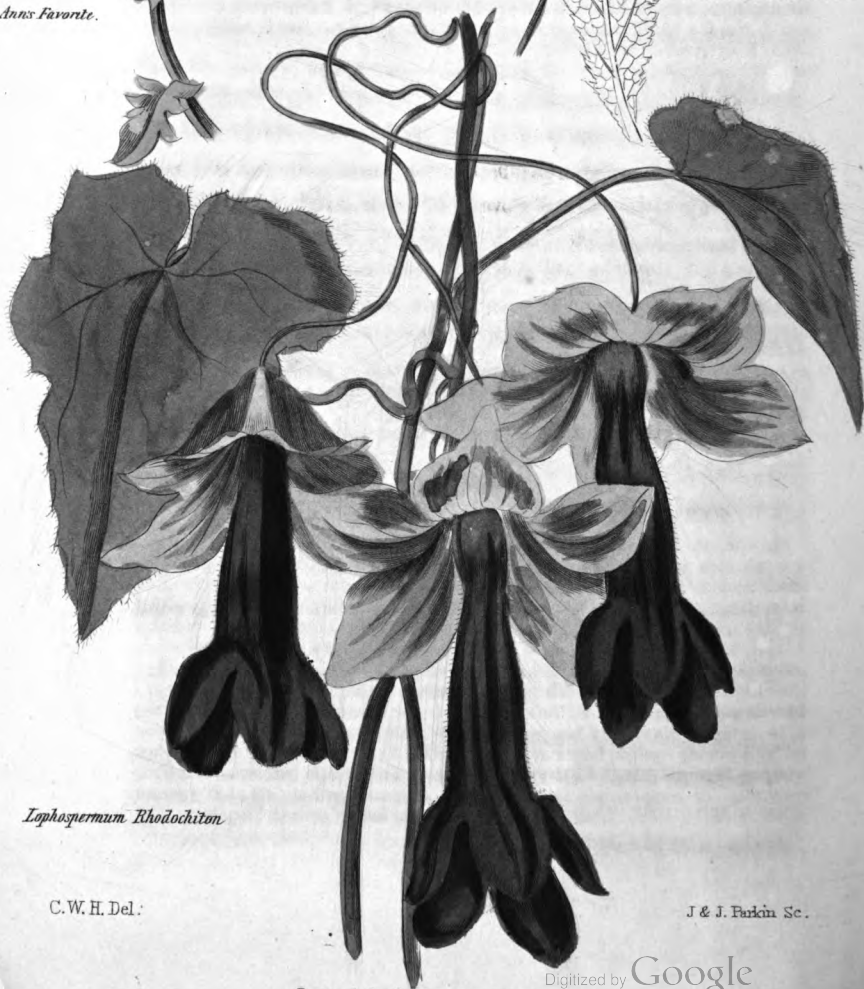
F. F. A.



Jane Ann's Favorite.



Calceolaria Harrisonii.



Lophospermum Rhodochiton

C. W. H. Del.

J & J. Parkin Sc.

THE
FLORICULTURAL CABINET,

OCTOBER 1st, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Composts suitable for growing Florists' Flowers.* By AN ARDENT AMATEUR.

Once more I trouble you with a few remarks on different composts, which you are welcome to insert in your very useful little Magazine, should you approve of them. Having often experienced the inconvenience of being obliged to refer from one book to another for a description of the composts suitable for different flowers, I have collected some of the most approved together, thinking they might be useful to many of your readers. I will begin with

CARNATIONS.

- 1.—Two-thirds fresh loam ; one-third rotten frame-dung, with a little sand.
- 2.—One-half loam ; one-half rotten frame-dung, with a little sand.
- 3.—Five-sixths of No. 1 or No. 2 ; one-sixth leaf-mould, good for Picotees.
- 4.—One-third loam ; one-third peat ; one-third two-year-old cow-dung.

RANUNCULUSES AND ANEMONIES.

Two-thirds loam ; one-third rotten cow-dung.

DAHLIAS AND NARCISSUSES.

Loam well manured.

VOL. II.

2 F

HYACINTHS.

1.—One-third sea or river sand; one-third loam; one-fourth rotten cow-dung; one-twelfth leaf-mould.

2.—Two-sixths grey sand; two-sixths well-rotted cow-dung; one-sixth tanners' bark, quite rotted; one-sixth tree leaves, well rotted.

PINKS.

Two-thirds loam; one-third two-year-old cow-dung.

TULIPS.

Good sound loam.

AURICULAS.

1.—One barrowful of loam; one do. leaf-mould; one do. old frame-dung; one do. two-year-old cow-dung; one peck of river sand.

2.—Two barrowfuls of sandy loam; one do. leaf-mould: one do. two-year-old cow-dung.

3. One-half rotten cow-dung; one-sixth loam; one-eighth leaf-mould; one-twelfth sand; one-twenty-fourth decayed willow wood; one-twenty-fourth peat; one-twenty-fourth ashes of burnt vegetables.

POLYANTHUSES.

1.—One barrowful of sandy loam; one peck of leaf-mould; one do. old cow-dung.

2.—One barrowful of well-rotted cow-dung, or leaf-mould; one-half do. white sand; two do. good loam.

HEARTSEASE.

Three barrowfuls of fresh loam; one do. one-year-old horse-dung; one peck of sand.

AN ARDENT AMATEUR.

ARTICLE II.—*An Experiment on the Culture of the Erythrina Crista Galli in the open Border.* By Mr. WM. BARRATT, Nurseryman, Wakefield.

Having long thought it possible to make many valuable additions to our beds of flowers in the open air, (I mean of such sorts as would bear being planted and left there during the winter season,) I was induced some years ago to try several kinds of plants

which I had always hitherto seen kept (at least in winter) in the stoves and green-houses. Many died, but some have flourished. The *Erythrina Crista Galli* is one which has succeeded: it had a far better bloom the second season than the first; and at this present moment, which is the third season, it has three stems of fine flowers upon it. My method of treatment was as follows:—I planted it out about April 1831, in an east border, against an east wall, which gets the sun about twelve o'clock; it threw up two stems, each about two feet high, but flowered rather weakly. In October I cut it down, and put a hand-glass over the stem and root. In April 1832 it pushed several shoots, which I reduced to two; and in August and September it bloomed splendidly, each flower-stem reaching about six feet high, and the bloom being much finer than I, and several gardeners who happened just then to visit my nurseries, had ever seen it in pots. I cut it down as before, and it remained without any protection from glass, mulch, &c.; and in 1833 it again put out shoots stronger and better than ever. When well grown in a rich sandy soil, I think it excels almost any hardy plant I know.

Some other green-house, and even stove plants, have lived out two winters; and should they continue to flourish, I will trouble you with a few remarks on them also.

WILLIAM BARRATT.

Wakefield, August 7th, 1834.

ARTICLE III.—*On the Culture of Carnations, and Raising them from Seed.* By Mr. D. PEARCE.

Herewith I send you a few practical remarks on the culture of the Carnation, hoping that they will prove acceptable to your readers.

From Seed.—Choose such plants as possess the very best properties in every respect except being double; that is, let the colours be clear and vivid, the petals strong and well placed, &c. When the plants to bear seed are selected, place the pots upon a stage in an open situation, sheltering the flowers from rain by a covering. Give them a regular supply of water until the seed is perfectly ripe, which will be in August, and may be known by the capsules

becoming brown, and the seeds nearly black. This must be attended to, for if gathered too soon, by far the greater part will be unproductive. Take care to extract the petals as they wither, for, if left in, they are apt to imbibe and retain the wet, and thus rot the base of the seed-vessel, and render it abortive. When the seed is gathered, allow it to remain in the capsule till the middle of the following May. Fill some pots, or pans, with the compost in which the plants are recommended to be potted; lay on a little fine-sifted soil, just sufficient to cover the seeds; place the pans in an airy part of the garden, keep the soil moderately moist, and shade from sun and dashing rains. When the plants are three inches high, and have six leaves, plant them on a bed of rich mould, composed of good loam and rotten dung, in equal parts. Plant them in rows, ten inches apart in the row, and twelve from row to row. Shelter them with hoops from the effects of rain or frost.

Composts.—For the strong and high-coloured Bizarres and Picotees, take two barrowfuls of light rich maiden loam, one of old cucumber-bed dung, and half a barrowful of river sand. For the rose and purple Flakes, and delicate Picotees, take two barrowfuls of good rich loam, and two at least of well-rotted dung, and half a one of river sand. Mix these well together in the autumn, and turn it two or three times during the winter; but never pot in sifted soil. The pots should be 12 inches deep, and 10 wide, with a good hole in the bottom, and three or four small ones round the sides. Pot in the middle of March, putting three plants in each pot. In June give the plants a top-dressing of leaf-mould and sheep-dung, which will give them a healthy appearance, enable them to grow much stronger, and give a greater richness to their colours.

Layering.—As soon as the flowers have turned their height of perfection, the plants should be layered. Prepare a quantity of hooked pegs, and light soil composed of sandy loam and leaf-mould. Cut off the lower leaves of the plants; stir up the old earth in the pots, and fill up with the above soil not sifted; then make an incision with a sharp penknife, entering about a quarter of an inch below a joint, and passing the blade of the knife up through the centre of it; continue to one-half or three-quarters of an inch above it. The portion of the stem left below the bottom

of the joint must be cut off horizontally close to the joint, which will complete this part of the operation. The incision being thus made, the layer must be gently pressed into the mould, and secured by one of the pegs, not less than half an inch, nor more than an inch, below the surface, raising the extreme point of each as upright as possible; water and shade as the weather may render it necessary, and in three weeks they will have struck root, and be ready to pot off in six weeks. When the layers have struck root, cut them off from the parent roots, without any of the stalk below the incision attached to them, and plant in 48-sized pots, filled with good loam and leaf-mould,—a single plant in each, if strong; if small, two, or even three, may be planted in each pot, placing them round the sides. When potted, place them under an arch of hoops in an open, airy part of the garden; in this situation, shelter them, by means of mats, from heavy, dashing rains and cold winds till winter. About the middle of October, prepare a frame for the reception of the plants: set it in a warm situation opposite the south, and fully exposed to the sun; raise it from the ground by laying a brick under each of the front corners, and two bricks under each of the back ones, which will give a good level towards the sun; then proceed to place all round the outside of the frame not less than a foot thick of soil, well trodden down, and raised nearly as high as the top of the frame. Next lay a good floor of lime scraps, and on that about six inches of coal-ashes, on which the plants are to stand. This will prevent worms from penetrating, and add much to the warmth and cleanliness of the plants. Elevating the frame is far preferable to setting it on the ground, as it is not so liable to rot, and the more the plants are raised above the level of the surrounding earth, by a thick floor of ashes, the more easily they will be kept free from damp. The frame being prepared, remove the plants to it, and cover with glasses in wet or frosty weather. Care must be taken not to shut them up too close, if the plants are wet, or they are very apt to become infested with mildew.

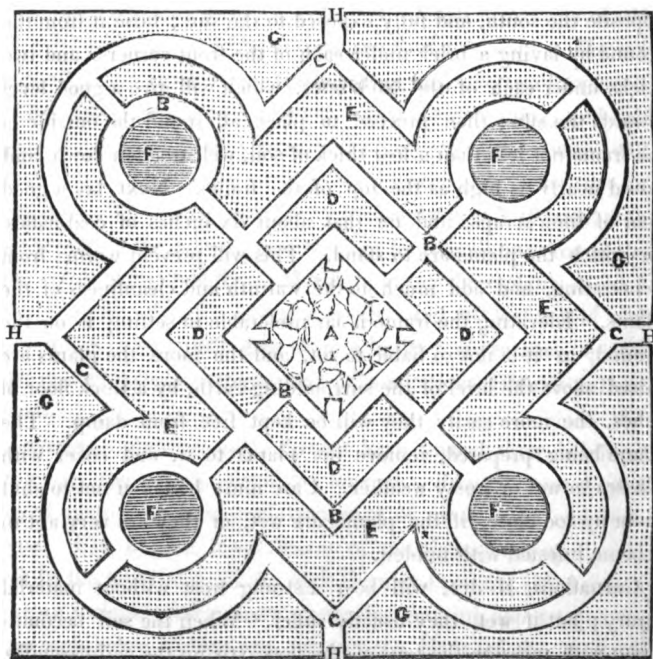
Carnations, if dry, will bear a strong frost without material injury; but if wet, they usually suffer. When the soil becomes green with moss on the tops of the pots, stir up the soil carefully half an inch deep, and sprinkle a little coarse sand upon it. Do this as often as requisite.

D. PEARCE.

May 2nd, 1834.

ARTICLE IV.—*On a Plan adapted for a Flower Garden, to be devoted exclusively to Plants indigenous to Great Britain.* By MR. F. F. ASHFORD.

I here present for insertion in the pages of the *Cabinet*, if deemed worthy of admittance, and worth an engraving, the annexed plan. It is an intended representation of a native flower garden, or a portion of ground appropriated exclusively to plants indigenous to Great Britain. Our own native productions are often looked over, and, as it were, not observed at all, except by the scrutinising eye of the scientific and acute botanist; while exotics of foreign countries are introduced, and suffered to engage our attention, to the depreciating and undervaluing of our own: while, if a suitable spot of land were allotted for the cultivation of indigenous plants alone, I have no doubt but it would form a garden not to be equalled for beauty, fragrance, or continuance of flowers, by any similar place planted with the picked produce of foreign countries.



A is intended to be an elevated piece of rock-work, planted with dwarf mountainous plants, regulating their appearance and diver-

sifying their colours as much as possible ; the short gravel walks are intended to lead to some rustic seats fixed in the rock-work, with Ivy or other climbing plants about them. B B B B represent grass walks ; C C C C, a gravel walk surrounding the whole. D D D D are intended for beds retaining all the bulbous-rooted plants together, distributing them in each bed, so that they all may have plants in flower during the whole season, or they may be systematically arranged, so that each bed may contain a single natural order—as, for instance, the orders Cruciferae, Compositae, Leguminosae, or Umbelliferae ; but this can be left to the taste of the proprietor. E E E E are beds for herbaceous plants, the colours being mixed in each or kept in distinct beds, as red, blue, yellow, white, &c. F F F F are fountains for aquatic plants, supplied by means of pipes from some neighbouring water. The whole may be surrounded, close to the gravel walk, by a neat wire fence, or close pales, to exclude vermin : if pales be used, it should be further surrounded by a neat, well-clipt edge of native plants, as Roses, Privet, Sweetbriar, &c. Where it is wished to be very private, the ground G G G G may be planted with native forest trees, both deciduous and herbaceous. H H H H, the entrance gates.

F. F. ASHFORD.

April 4th, 1884.

ARTICLE V.—*On the Culture and Preservation of Gloxinia maculata and speciosa.* By W. K.

Having seen a Query in the first Volume of the *Floricultural Cabinet*, for information on the culture and preservation of the *Gloxinia maculata* and *speciosa*, and having cultivated these beautiful plants for a number of years with great success, I take the liberty to submit the mode of treatment which I have adopted, and which has amply repaid me with a fine show of flowers every year. The *G. maculata* is a plant that requires a strong heat to have the bloom in great perfection. It is a perennial plant, flowering late in the season, and consequently requires forcing to bring it forward, so as to have a good show of flowers before it be too late in the season. The flower-stems and leaves die every year after flowering, but if kept in the stove or the warmest part of the green-house,

a number of offsets will then, or immediately after, make their appearance. In February or March, or as soon as forcing of any description is going on, the old root should be shaken out of its present pot, and the offsets be divided and planted singly into small pots well drained, using light rich loam ; then place them in a heat of not less than 70 degrees of Fahrenheit ; a dung hot-bed is an excellent situation to bring them on. They will require larger pots as they advance in growth, and a plentiful supply of water. They will generally be in fine flower in July or August, when they may be placed among other tender exotics in the greenhouse where they make a fine display while in bloom ; after which they may be placed in the stove or the warmest part of the greenhouse, and have very little water given them for the winter. The *Gloxinia speciosa* is a plant much better adapted to the greenhouse than the above ; yet the larger leaves of a full-sized flowering plant generally die in winter, but if kept free from frost, and in a dry state, will set up numerous again in the spring, when they may be fresh potted into a light loam, reducing the balls a little, and paying particular attention to the drainage. When in a free growing state, they will require regularly supplying with water, and fine healthy flowering plants may be expected. I propagate by division of the tubers, striking the young offsets ; or leaves, with the petioles left the whole length, and put in as cuttings in the usual way, make excellent flowering plants. The above plants, with various other stove perennials, certainly do much better if constantly kept in a stove, than when kept in a greenhouse ; yet they may be had in tolerable perfection in the latter situation, by keeping the pots dry in winter, and adding extra heat in the spring.

If you think the above observations worth notice, they are entirely at your service.

W. K.

Kirk Ella.

ARTICLE VI.—*Observations on the Sale of Tulips.* Communicated by SNOWDROP.

As the season is advancing for London Tulip sales, it may be worth while to put the young and unwary florist on his guard against imposition. To this end the following remarks of Mr.

HOGG (*Supplement*, p. 33) will, I hope, be useful; knowing, as I do from experience, that they are quite correct.

SNOWDROP.

"In the sale of dry bulbs, which frequently take place by public auction, there is always great risk and uncertainty in buying; and let the deception practised be ever so barefaced and roguish, there is no redress by law; for the auctioneer makes it one of the conditions of sale, 'that they are to be paid for, and taken away immediately after, with all faults and errors of description,' so that neither he nor his employers are responsible. I have been deceived, or, more properly speaking, I have been cheated alike in Hyacinths, Tulips, Ranunculuses, Dahlias, and Carnations. If, unawares, you attend a mock auction, and feel inclined to purchase any articles of furniture, you trust to your eye-sight and judgment; but, in the sale of flower roots, you have nothing to guide you—nothing to trust to, but the supposed good faith and probity of the vender: if they are found to be correct when they flower, it is all very well; and if they are not so, it is useless to complain, because there is no remedy. The idea of buying cheap, I suppose, is the great inducement with many; but what is the use of buying cheap, if you are dissatisfied with your bargain afterwards. Very few young florists are able to detect impositions of this sort; therefore the complaint is not so loud and general as it otherwise would be: and when they are detected, many are ashamed to confess that they have been duped and taken in. My observations here apply more particularly to the dry bulbs of Tulips and Ranunculuses."

ARTICLE VII.—*On the Propagation and Cultivation of Plants. No. II.* By Mr. F. F. ASHFORD, Gardener to H. MARTIN, Esq., Colston Hall, Bingham, Notts.

Omitted in No. I.—Burtonia, so named by ROBERT BROWN, in honour of Dr. BURTON, a collector of plants for Kew Gardens.

Genera 6. Cyclopa. C. 10, or. 1, sp. 3. This is a very pretty genus, raised by cuttings that are very young, being placed in pots of sand under a bell-glass, which must occasionally be wiped, or else the cuttings will be liable to damp off. An equal

mixture of sandy loam and peat is the best soil for them. *Cyclopia*, named by VENTENAT from *kyklos*, a circle—*pous*, a foot ; in allusion to the replicate circle found round the base of the seed-pods.

Genera 7. *Chorizema*. C. 10, or. 1, sp. 4. An equal mixture of loam, peat, and sand suits these plants best ; and young cuttings, planted under a hand-glass in sand, will root readily ; but they are best raised by seeds, which ripen in abundance. M. LABILLARDYNE originally discovered this plant upon the south-west coast of New Holland, at the feet of mountains, near a spot where, after having been tantalised with finding many salt springs, he had the good fortune to meet with an abundant supply of fresh water. This welcome refreshment induced him to name this plant upon the occasion : he named it evidently from *choros*, a dance—*zemia*, annoyance ; in allusion to the joy created after so much perplexity.

Genera 8. *Callistachys*. Cl. 10, or. 1, sp. 4. These are handsome conservatory shrubs, which grow rapidly, and flower freely. Propagated by means of seeds, which ripen in abundance ; or by cuttings planted in sand under a hand-glass, which will readily take root ; they should afterwards be cultivated in a mixture of sandy loam and peat. Named by VENTENAT from *kalos*, beautiful—*stachys*, a spike ; in allusion to the beautiful flowers being produced in spikes.

Genera 9. *Daviesia*. C. 10, or. 1, sp. 13. Beautiful plants, resembling Furze ; natives of New Holland. An equal quantity of sandy loam and peat is a proper soil for them, and cuttings not too ripe will root readily in pots of sand placed under a bell-glass. *D. latifolia* is considered a very difficult kind to strike, but will root freely by the above method. Named by SMITH in honour of the Rev. H. DAVIES, F.L.S., a celebrated Welsh botanist.

Genera 10. *Dillwynia*. C. 10, or. 1, sp. 11. Beautiful evergreen shrubs ; natives of New South Wales ; with the aspect of Heaths, and, like them, liable to rot from too much wet ; the pots must, therefore, be well drained with broken potsherds. An equal quantity of loam, peat, and sand ; and young cuttings root freely in pots of sand under a hand-glass. *Dillwynia*, named by Sir J. E. SMITH in honour of LEWIS WESTON DILLWYN, whose labours upon *Conserva* and other parts of British botany are well known.

Genera 11. *Euchilus*. C. 10, or. 1, sp. 1. *E. obcordatus* is a pretty New Holland plant, and thrives well in an equal mixture of turfy loam, peat, and sand. Propagated by young cuttings planted in sand, under a hand-glass. *Euchilus*, so named by BROWN from *eu*, well—*chilos*, a lip; in allusion to the upper lip of the calyx being very large.

Genera 12. *Edwardsia*. C. 10, or. 1, sp. 5. These plants are natives of New Zealand, and hardy enough to survive our winters when not too severe; but it is best to protect them in case of failure. Increased by young cuttings, planted in pots of sand, under a bell-glass; but if the species are planted in a conservatory they generally ripen seed, by which they may be readily increased. Sandy loam and peat is the best soil for them. Named by SALISBURY in honour of SYDENHAM EDWARDS, a celebrated botanical draughtsman.

Genera 13. *Eutaxia*. C. 10, or. 1, sp. 2. A pretty New Holland genus, thriving well in a mixture of sandy loam and peat, and increased by young cuttings, planted in sand, under a bell-glass. The plants should frequently be topped, to encourage them to grow bushy, or else they are apt to run up naked and unsightly. *Eutaxia*, from the humble, modest appearance of the plant: named by ROBERT BROWN.

Genera 14. *Macrotropis*. C. 10, or. 1, sp. 1. A Chinese genus of herbaceous plants, growing freely in a light rich soil, and readily increased by seeds, or by dividing at the root. Named by DECANDOLLE from *makros*, long—*tropis*, a keel; in allusion to the length of the innermost petal of the blossoms.

Genera 15. *Gompholobium*. C. 10, or. 1, sp. 17. A beautiful genus of evergreen shrubs; natives of New Holland. Its species thrive best in an equal mixture of very light loam, peat, and sand; taking care not to over-water them, as they are tender, delicate plants, and difficult to preserve. Young cuttings root freely in pots of sand, under a bell-glass. Seeds will sometimes ripen plentifully. *Gompholobium*, so named by SMITH, from *gomphos*, a wedge—*lobos*, a pod; in allusion to the tumid shape of the legumen, which swells from a narrow base upwards.

Genera 16. *Gastrolobium*. C. 10, or. 1, sp. 1. *G. bilobum* is a very pretty plant, a native of New Holland, and well adapted for the pit of a conservatory, thriving well in an equal mixture of

sandy loam and peat, and increased by seeds and young cuttings, which will root in sand under a bell-glass. *Gastrolobium*, from *gaster*, a belly—*lobos*, a pod; the seed-pods of this genus being very much swelled.

Genera 17. *Jacksonia*. C. 10, or. 1, sp. 4. A pretty genus of New Holland, increased by young cuttings placed in sand under a bell-glass, or ripened ones under a hand-glass. Sandy loam and peat is the compost in which they will thrive the best. Named by BROWN in honour of G. JACKSON, formerly librarian to AYLMER BOURKE LAMBERT, and an excellent practical botanist, of whom too little is known.

Genera 18. *Mirbelia*. C. 10, or. 1, sp. 6. A very pretty New Holland genus of evergreen shrubs. An equal mixture of sand, loam, and peat suits them very well; and young cuttings root without difficulty in sand under bell-glasses. Seed sometimes ripens, by which they are readily increased. *Mirbelia*, named by SMITH in honour of C. F. B. MIRBEL, a distinguished French physiological botanist, whose elucidations of the reticulated structure of vegetables make it proper to consecrate to his merits plants remarkable for their reticulation.

Genera 19. *Ormosia*. C. 10, or. 1, sp. 2. A West Indian genus of stove evergreen trees, thriving in a light loamy soil, or a mixture of loam and peat. Seeds generally vegetate freely, and young cuttings will root freely in sand under a bell-glass. Named by JACKSON from *ormos*, a necklace, for making which the handsome seeds (red, with a black eye) of the species are well adapted.

Note.—All the above genera, with the exception of No. 19, which is for the stove, and No. 14 for the flower garden, are inmates of the green-house or conservatory.

F. F. ASHFORD.

ARTICLE VIII.—*On Plants which are peculiarly adapted for Planting in Beds in Masses; each kind being showy and profuse in Flowering.* By FLORA.

(CONTINUED FROM PAGE 206.)

Malope grandiflorum. Monadelphnia, Polyandria. Malvaceæ. This very showy plant is of the Mallow tribe; grows two feet to

two feet six inches high. The flowers are produced in great abundance, and being of a fine rosy-crimson, make a very gay appearance, rendering it a desirable plant for giving a distant attracting effect. It blooms from June to the end of October, unless cut off by frost. Seed should be sown in pots, early in March, and be raised in a hot-bed; or may be sown upon a hot-bed, under a frame or hand-glass. The plants may be set out in the open border by the middle of May. I find it best to raise them in pots, as I can divide the plants without injury to the roots, and thus retain all the fibrous ones; this is essential for their striking again. Plants that are raised upon a hot-bed, and have the privilege of extending their roots to any desirable length, run to a great extent. The fibrous roots being very distant from the stem of the plant, are, in taking up, generally broken off, and it is difficult to get the plants to grow again; if they survive at all, they are generally very weakly: so that, if raised on a hot-bed, great care must be given to get all the fibrous roots. The plant blooms most profusely in a good loamy soil, mixed with a little manure or leaf-mould. If the soil be very rich, the plant will be liable to grow too vigorously, and produce a vast profusion of foliage, which will rather conceal the flowers; but if moderately enriched, it will produce one mass of bloom. I find it profitable to give all my flower-beds an addition of fresh soil every winter, generally adding about two or three inches deep. If the *Malope grandiflora* is not desired to come into bloom *before the beginning of August*, the seed may be sown in March, in the open border where it is desired the plants shall blossom. The plant produces seed in abundance, which ripens well from plants that bloom early in the summer.—(*To be continued.*)

[NOTE.—In the former part of this Article (p. 204), for *Calandria*, read *Calandrinia*.]

ARTICLE IX.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.* By ST. PATRICK.

(CONTINUED FROM PAGE 182.)

NAMES.	DESCRIPTION.
627 Salamanque.....	Beautiful pale scarlet.
628 Salve	Fine red.

230 ON THE COLOURS AND PROPERTIES OF ROSES.

NUMBERS.	NAMES.	DESCRIPTION.
629	Sanache	Small red.
630	Saicho Panza	Flesh colour.
631	Sang de Bœuf	Purple.
632	Sangrado	Crimson.
633	Sanguinea	Small scarlet.
634	Sun Joseph	Large red.
635	Sappho	Very fine scarlet.
636	Scipius	Light crimson.
637	Seguse	Purple.
638	Sempervirens alba major	Exquisitely beautiful white, in clusters: evergreen.
639	Sephine	Lilac purple.
640	— superbe	Red and blush.
641	Seraphine	Pinkish crimson.
642	Single Cluster Musk	White.
643	Single Yellow	Bright.
644	Sinoluta	Scarlet and purple.
645	Sirocco	Curled scarlet and crimson.
646	Sir Sidney Smith	Rosy purple.
647	Soliel levant	Blazing pink.
648	Sophie brillante	Large blush.
649	Sowanof	Large purple.
650	Splendens	Fine deep blush.
651	Spongii	Small compact red.
652	St. George	Fine red.
653	Statutes General	Pink, tinged with purple.
654	St. Jacques	Small dark purple.
655	St. Louis	Light red.
656	St. Patrick	Dark blue purple.
657	Stratholder	Fine large reddish purple.
658	Strasburg	Pale pink.
659	Suan	Scarlet, tinged with purple.
660	Sultan	Pale red.
661	— Achmet	Fine scarlet.
662	Superb ambour	Large pale blush.
663	— bouquet	Pink; grows in clusters.
664	— brunette	Small deep purple.
665	— carmine	Large globe.
666	Superbe	Light crimson.
667	— Duchesse	Large bright pink.
668	Superb Royal	Crimson.
669	— Wood's	Fine purple, semi-double.
670	Supreme	Pink.
671	Surpass Vulcan	Fine crimson purple.
672	Surpassante	Fine small blush.
673	Surprenante Beaute	Purple globe.
674	Surprise d'Angleterre	Beautiful bright red.
675	— de Province	New, small blush.
676	— du monde	Large pale blush.
677	Susanna	Curled blush.
678	— Elizabeth	Pinkish blue.
679	Suwarrow	Scarlet and light purple.
680	Sweet William	Small variegated crimson.
681	Talma	Light red.
682	— nouveau	Splendid semi-double scarlet & purple.
683	Tavisianum	Pinkish blush.
684	Tegridia	Pale scarlet, tipped with crimson.
685	Temple d'Apollo	Large semi-double crimson.
686	Tendresse	Pink and purple.
687	Therese	Light blush.

(TO BE CONTINUED.)

PART II.

REVIEWS AND EXTRACTS.

Floriculture; comprising the General Management and Propagation of Stove, Green-house, and Hardy Herbaceous Plants, Trees, and Shrubs. By J. MANTELL, F.L.S. 2nd Edition. 8vo. 52 pages. Price 7s. 6d.

In Vol. I., page 34, we expressed our approval of the first edition of this work; and we find in the second considerable additions. The matter is practical and useful; and much is compressed into the volume. We think, however, that a cheaper edition should be published, in order to extend its circulation to all classes of readers. We extract the following on

THE DAHLIA.

The Dahlia is a native of Mexico, and was first introduced into this country in the year 1789, at which period it attracted but little notice, and the species was soon lost. Although this flower was re-introduced by Lady HOLLAND in 1804, it is only within the last few years that the attention of the florist has been directed to its cultivation and improvement. It is now admitted to be the chief ornament of the flower-garden during the autumnal months, and independently of the great variety and splendour of its flowers, it is valuable to the florist as filling up a void at that season of the year in which but few other plants are in blossom.

It has been computed that not less than twenty thousand seedling Dahlias are raised annually in this country. The facility with which they may be raised—the comparatively short period which intervenes between the time of sowing and that of flowering—and the great success which has hitherto attended this mode of propagation, will, no doubt, account for the extensive cultivation of this highly esteemed flower.

The Dahlia is propagated by cuttings and by divisions of the crown, and new and beautiful varieties are constantly raised from seed. The seed is usually obtained from the finest double flowers, but some successful propagators prefer that procured from semi-double varieties, and we believe that some of our finest Dahlias have been raised from semi-double seedlings. The seed should be collected early in the season, as soon as the blossoms have withered and the receptacles are sufficiently dry.

If desirable, the seed may also be collected late in the season, and when the receptacles are in a green state, in which case they should be divided and placed in a window or in any dry, warm situation; and if the seeds be allowed to remain in the calices, they will retain their vitality better than if detached from the receptacles.

The seed should be sown in large pans or pots, about the middle of February, and placed in a hot-bed frame. The young plants require to be potted off singly into the smallest-sized pots, soon after the cotyledons are above ground, and when the first pair of leaves are sufficiently developed. They should then be placed in the frame, nearly close to the glass, to prevent them from being drawn up weakly. When of sufficient size, they may be re-potted, placed in a cold frame, and protected at night, till the middle of May, that being the period of planting them in the open air.

Those who propagate extensively, sow the seed in hot-bed frames the beginning of March, and during the month of April, instead of potting, set out the young plants on a slight hot-bed, covering them at night with mats.

With the view of obtaining new varieties, some propagators transfer the pollen from one flower to another, by means of a small camel-hair pencil, in which case the flower intended to receive the pollen should be covered with a fine gauze bag, a day or two before the florets expand, and the covering should be continued a few days after the operation is performed. This method is seldom practised, unless for the sake of experiment, as the ordinary mode is found very successful in producing fine double flowers.

Cuttings may be made towards the latter end of February, or beginning of March. The old roots should be placed in a hot-house, or in a hot-bed, and the tubers should be covered with mould, sand, or finely-sifted tanners' bark, leaving only the crown exposed. They will soon put forth shoots; these should be carefully detached when about two or three inches in length, and planted singly in small pots filled with a compost of equal parts of well-decomposed leaf-mould, frame manure, and fine sand, to which should be added a sufficient quantity of finely-sifted garden mould. After the cuttings are inserted, they should be put into a hot-bed, carefully shaded from the sun, and protected at night by mats. If, in applying the linings, steam should arise, the plants will be liable to damp off, unless the lights be sufficiently raised to allow the rank steam to escape. In about a fortnight or three weeks the young plants may be removed to a cold frame, and gradually inured to the open air.

Where extensive propagation is required from new and choice varieties, the roots are usually placed in a hot-bed, and every shoot taken off when about two or three inches high, care being taken not to injure the buds which surround the base of the shoot, for if these are injured or broken off, fresh buds will not be developed from that portion of the crown.

Where only a limited supply of strong and vigorous plants is required, we have recently discovered that the finest plants are produced by detaching the young shoots, when about two or three inches high, so as to include the cluster of buds surrounding the base of each shoot. Some care is necessary in this process: the shoot should be held near its base by the finger and thumb, and by a slight motion of the hand it may easily be detached. If the operation be adroitly performed, the base of the shoot will present a convex appearance, surrounded by a number of incipient buds, and a corresponding concavity will be found in the crown of the plant from which the shoot has been extracted. Plants raised by this mode not only produce the finest flowers, but the crowns invariably break the following spring, which is not *always* the case with plants raised from cuttings in the ordinary manner: it has been asserted that the cause of failure has, in many instances, arisen from the removal of the incipient buds at the base of the leaves of that portion of the cutting which is usually inserted in the ground.

There can be no doubt, however, if the buds be removed, the cutting will readily strike root, producing luxuriant foliage and a profusion of flowers. But although the tubers are numerous and fully formed, it will, on inspection, be found that they are merely attached to a hollow stem, and, consequently, the crown being absent, no buds can possibly be developed by any subsequent treatment. It is therefore important, if the perpetuation of the plant be required, that the buds be not removed. Some propagators, indeed, on receiving new plants, examine the roots, and unless a portion of the crown be attached, they cut off the shoot close to the surface, treating it as a cutting, in the ordinary manner.

The plants, whether raised from seeds or from cuttings, may be planted out into the open borders from the middle of May till the beginning of June. They are usually planted from three to four feet apart; but if planted from four to five feet apart, they will not attain so great a height, and if trained to a single stem, will in general produce much finer flowers. The borders should be well manured every spring before planting, and at the same time about an equal part of good fresh soil should be added. The *Dahlia* will succeed in almost any soil, though a light sandy loam produces the finest plants: the variegated and striped varieties exhibit their colours more distinctly when planted in a peaty soil. The plan of training *Dahlias* to a trellis appears a good method of securing them, for when tied up to stakes

the wind frequently twists the plants and destroys their tops, but the former mode secures them against all winds, and exhibits the flowers to the greatest advantage: three or four stakes placed angularly round the plant, and the stems tied to them, will also answer the purpose.

To procure fine flowers for floral exhibition some cultivators train the plants to a single stem, removing all superfluous side shoots, as well as flower-buds, leaving only one or two flowers to expand. The soil should be kept constantly moistened, and when the plants come into blossom manure water should be liberally supplied. It has been asserted that some of the spotted varieties succeed best in a poor soil destitute of manure, and that success may generally be insured by removing the self-coloured blossoms as they appear. The luxuriant growth of the plants may be greatly retarded by treading the earth firmly round the roots. When the soil is of a loose open texture, evaporation should be checked by mulching the plants, and if the soil be covered with moss the moisture will be more effectually retained, and it will give the borders a neater appearance.

When the blooming season is near its close, about four inches thick of decomposed bark, or leaf soil, should be laid over the roots, extending two feet round the stem of each plant, to prevent the crown being injured by sharp and sudden frosts.

The tubers should be taken up on a dry windy day and the soil carefully shaken off, so as not to twist the roots. Having been removed to an airy situation in a shed, they should be placed singly over the floor, till the soil remaining on the tubers be dry, when they should be laid on shelves secure from damp or frost, and be covered with dry sifted tan or grey sand: they will, if so managed, keep perfectly sound till the following spring.

Choice seedlings or small tender tubers may be preserved during winter by placing them in pots of sandy loam, and giving them at the time of potting a slight watering, keeping them afterwards in a dry situation.

CRITERIA OF A FINE DOUBLE DAHLIA.—The flower should be erect and stand completely above the foliage, for if the peduncle be short, so that the flower be hid among the leaves, it will not be displayed to advantage.

Form, colour, and size are considered the essential properties of a fine Dahlia.

1. *Form.*—All good judges allow that perfection in form consists in the near approach to a hemisphere. The Springfield Rival may be given as an instance of the nearest approximation to a perfect flower: it is, however, too flat in the centre, and the outward petals are reflected. It is essential that the outline should form a true circle, and consequently the petals should be regularly disposed, rounded, smooth at the edges or rose-leaved, and slightly concave, but not so much so as to let the back of the petals be seen in the front of the flower. Those flowers whose petals are narrow, pointed, notched, or fimbriated, as well as those that are flat or convex, however desirable for the flower border, are objectionable as show flowers, as are also those which when fully blown exhibit the eye or disk. In some Dahlias the petals near the centre converge, and conceal the disk, which when the florets are fully expanded becomes exposed: these are, therefore, pronounced by florists imperfect flowers.

If the hemispherical form be assumed as the point of perfection in the Dahlia, those flowers would be preferred that rather exceed than fall short of this standard. The Countess of Liverpool has been adduced as an illustration of the former, and Lady Grenville of the latter, and the mean between these two examples constitutes an excellent criterion whereby to judge of perfection in the form of the Dahlia.

2. *Colour.*—As it regards colour, much must depend upon taste, but self, of whatever colour they may be, should be bright and distinct. In striped, spotted, tipped, or variegated varieties, the colours should be well-defined and every petal uniformly and distinctly marked. Those that are pounced, blotched, variously or irregularly marked, are inadmissible as show flowers.

3. *Size.*—When other properties are equal, size will determine the preference; but in judging of a good Dahlia, form must have the pre-eminence, then colour, and lastly, size; but in no instance should either form or colour

be sacrificed to size. The relative proportions of excellence in these criteria have been thus estimated :—form three, colour two, size one. Thus a Dahlia, possessing the properties of form and colour, would be judged superior to one having colour and size, the relative proportions being as five to three. By this standard the comparative merits of this class of show flowers have been estimated by the censors at the exhibition of the Metropolitan Florists' Society.

An Inquiry into the Causes of the Fruitfulness and Barrenness of Plants and Trees, with Practical Instructions for the Management of Gardens and Farms, and a System of training Fruit Trees, &c., founded on Scientific Principles; arranged as a Dialogue. By JOSEPH HAYWARD, Esq., Author of "The Science of Horticulture," "The Science of Agriculture," &c. 8vo. 292 pages. Orr and Smith, London. 1834.

This work contains much scientific and valuable information, and will be found essentially useful. We strongly recommend it to our readers; and although no price is stated, we hope it is so low that it may be purchased, without inconvenience, by the humblest cottager.

Plants figured in the following Periodicals for September :—

Curtis's Botanical Magazine. Edited by Dr. HOOKER, King's Professor of Botany in the University of Glasgow. Price 3s. 6d. coloured; 3s. plain.

1. *Acacia lineata*, Narrow-lined-leaved Acacia. Class. Polygamia; order, Monœcia. Natural order, Leguminosæ. A shrub of bushy growth, frequent in the interior of New South Wales, in barren forest grounds lying West from Wellington Valley, in long. 148° E.; as also in the country on the North from the settlement of Bathurst, where it flowers throughout the winter months (May—July), and ripens its legumes in December. It was originally discovered, during the progress of the expedition on the Lachlan River in 1817, and was two years since communicated by Mr. ARRON, from the Royal Gardens at Kew, where it flowers with many of its kindred, in the months of April and May.

2. *Campanula macrantha*, var. *polyantha*, Large-flowered Giant Bell-flower; many-blossomed var. Pentandria, Monogynia. Campanulacæ. A very handsome variety, and most worthy of a place in every collection, and in the borders of every shrubbery.

3. *Indigofera violacea*, Purple Indigo Plant. Diadelphia, Decandria. Leguminosæ. This very handsome shrub has stood for several years in the open air in the Botanic Garden, Edinburgh, and flowered for the first time in July 1834.

4. *Gardenia florida*, fl. *simplici*, Single-flowered Cape Jasmine. Pentandria, Monogynia. Rubiacæ. This delightfully fragrant shrub flowered in June last, in the noble gardens of Wentworth, where it was received from the East Indies, and is treated as a stove plant. *Gardenia*, so named in honour of D. ALEXANDER GARDEN, botanist and zoologist, a native of Scotland, but who settled as a physician at Charleston, South Carolina.

5. *Alstrœmeria aurea*, Golden-flowered Alstrœmeria. Hexandria, Monogynia. Amaryllideæ. This species, imported by Mr. ANDERSON from Chiloe, was received at the Bôtanic Garden at Edinburgh, from Mr. Low, of Clapton, under the specific name here adopted; and is now in flower in the green-house. In habit it approaches nearly to *Alstrœmeria pulchella*, but probably will always be a much smaller plant.

6. *Morinda jasminoides*, Jasmine-like Morinda. Pentandria, Monogynia. Rubiaceæ. A volubilous suffruticose plant, rare in shaded brushes of the Colony of Port Jackson, where it was detected by Mr. ALLAN CUNNINGHAM, bearing its orange-coloured berries, in the month of March, 1821, by whom it was introduced to Kew, where it flowered in April. In habit it resembles a *Jasminum*: and as a species, it approaches very near to *M. parvifolia*. A native of the Island of Luconia, one of the Philippines.

7. *Datura ceratocaula*, Horn-stemmed Stramonium. Pentandria, Monogynia. Solanææ. This fine annual is a native of Cuba, whence it was introduced to our gardens through the medium of Spain, and blossoms in the open air during the months of July and August. The plants are best raised in a frame, transplanted into the open border in the spring months, and if into a poor soil, they will have less of the rank and weedy character which all the annual species of this genus exhibit. *Datura* is from the Arabic word *Tatorah* (Forskæel). In some parts of the East Indies it is called *Daturo*.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Ph.D., F.R.S., L.S., and G.S., Professor of Botany in the University of London, &c. &c. Price 4s. coloured; 3s. plain.

1. *Oncidium ampliatum*, Broad-lipped Oncidium. Gynandria, Monandria. Orchideæ. First found in central America by Mr. CUMING, and afterwards procured in a living state by RICHARD HARRISON, Esq., from whom the beautiful specimen now figured was received in March last. Peculiar as are its flowers, and distinct as the species is in most respects, it is curious that its leaves and pseudo-bulbs should be so like those of *O. Papilio*, that we have known the latter to be mistaken for it. Like all the rest of its genus, it requires the hot damp atmosphere of a stove, in which, if we may judge by Mr. HARRISON's specimens, it finds itself perfectly at home. We have not yet heard of it in any other collection. It is well known that the most considerable part of the Epiphytal Orchideæ is found in the greatest vigour in damp sultry woods of tropical countries; and accordingly we endeavour in our artificial cultivation, to form an atmosphere for them as nearly as possible that which they would naturally breathe in such stations. That this is attended with very great success is obvious from such plants as the one now figured, and from the numerous splendid specimens which are from time to time appearing in the collections of Earl FITZWILLIAM, Lord GREY, of Groby, the Messrs. HARRISON, BATEMAN, HUNTLEY, LODDIGES, and KNIGHT, and the Horticultural Society. But it is sufficiently evident that although this kind of treatment is admirably suited to a considerable number, there are others which grow most unwillingly, or scarcely survive, under such circumstances. For instance, *Dendrobium speciosum* languishes in situations where the *Stanhopeas* are in their greatest splendour; and the Chinese *Bletias* almost perish by the side of *Eulophia* and *Zygopetalum*. This arises from the great difference in their respective constitutions, which are each adapted to distinct conditions of life, and our failure arises from our mistaking a general principle for an universal law. If a great majority of Epiphytal Orchideæ swarms in damp tropical forests, there is a considerable minority which lives in an entirely different climate, of which a few examples will not be without instruction. Thus in the genus *Oncidium* itself, where almost all the species are of tropical habits, *O. nubigenum* is only found on the cool mountains of Peru, at the height of 14,000 feet; it

will therefore require a treatment altogether distinct from that of the mass of the genus. *Dendrobium moniliforme* and *calenatum*, again, occur only in Japan, as far north as 37° or 38° , or the parallel of Lisbon, and are periodically subject to a very low temperature. But the most remarkable instances of a disposition of the part of some Orchideous Epiphytes to depart from the ordinary habits of the tribe are found in Australia and its dependency New Zealand. In some extremely valuable observations upon the geographical distribution of the Orchideous plants of New Holland, which have been placed in our hands by Mr. ALLAN CUNNINGHAM, we find a passage which bears so directly upon this subject, that we cannot do better than quote it entire. "There are two, if not three plants of this family," says this enterprising and scientific traveller, "that grow on trees or rocks in New South Wales, whose natural constitution should, in cultivating them, form exceptions to the uniformly adopted mode of treatment of Epiphytes generally in our English stoves; namely, that in which high temperature and considerable humidity are employed. These are *Dend. æmulum*, Br., an Epiphyte uniformly found upon the rugged trunk of *Eucalyptus resinifera* or Iron-bark, in the open very dry forest grounds of the older colony at Port Jackson;—*Cymbidium canaliculatum*, Br., which of late years has been observed beyond the tropic, both at Moreton Bay and still farther to the southward at Hunter's River, growing upon the principal limbs of several of the *Eucalypti* in the dry open shadeless forest. These two Epiphytes flourish most luxuriantly in an extremely dry atmosphere, and flower usually in the summer season in their native wilds, the high temperature of which is oftentimes greatly increased by the blighting hot winds, which not unfrequently prevail at that period from the north-west. The third is *Dendrobium undulatum* of Mr. BROWN, a handsome species, originally discovered by Sir JOSEPH BANKS, at Bustard Bay, and which has been lately found on barren hills, naturally clear of timber, upon the banks of the Brisbane River at Moreton Bay, where the plant forms tufts on bare rocks exposed to the full heat of the sun, which during nine months of the year is very considerable on that part of the coast. These species were some years since received alive at Kew, from New South Wales; and with them was communicated, as a guide to their culture, a note of the particular situations, with regard to exposure to drought, &c. which they naturally occupy and delight in, in their native wilds. These particulars were, however, in all probability wholly unheeded in the King's Gardens—the plants were associated with other Epiphytes of this vast and variable family, from Equinoctial America and the West India Islands, desiring a humid air with warmth to luxuriate in, amongst whom the Australians soon shewed sickness, in consequence of the excess of moisture to which they were constantly subjected; and eventually dying, were not only lost to Kew, but I may add to Europe! Had they been placed in the dry stove among Cacti, Stapeliæ, &c. with but an occasional light sprinkle of water afforded them, they would have fared better! *D. æmulum* was, I find, notwithstanding, induced to flower, and thus shewed by its delicate blossoms that it was well worthy of better treatment: and might afterwards have been retained, had the notes communicated with the plant from the Colony, and its look and constitution, so to speak, been at all consulted. I would just observe, in this place, that it is to be greatly regretted, that collectors of these beautiful vegetables in foreign countries, are not more careful to note and communicate home with the collections they form, the particular localities of the species, which would be of great use to the experienced cultivator; inasmuch as it would enable him to treat them in a way, as nearly accordant with their habits in their respective native countries, as would secure their lives in the Garden, and probably induce them to flower when fully established in their new situations." To these instances of Orchideous Epiphytes may be added two others, which are worthy of still more attention than those just cited. One is the beautiful little *Gunnia australis*, which has much the aspect of *Chiloschista usneoides* found in the jungle of Nipal; it grows on the branches of shrubs in Emu Bay, in Van Diemen's Land, in about 41° S. Lat. and 146° E. Long. *Earina mucronata* is the other example. This plant, although occurring as

far to the Northward as 35° S. Lat. in humid forests at the Bay of Islands, in New Zealand, exists also in abundance in the "very (permanently) damp woods which clothe the shores of Dusky Bay, (Lat. 45° 45' S.) on the western side of the Larger or Middle Island of New Zealand," where it was originally observed by Forster, in Cook's Second Voyage, and where it has been since met with by Mr. CUNNINGHAM, whose words we have quoted. Considering the lower rate of temperature which prevails in the Southern hemisphere, as compared with that of the Northern in corresponding latitudes, the station of *Earina* in New Zealand is not naturally different from the damper parts of the south-west coast of Ireland. These remarks will we trust suffice to cause a greater degree of attention to be paid to the differences of constitution of particular species of Orchideous Epiphytes; for although we have only cited extreme cases, we may be assured that minor peculiarities, which is not less important to study, exist in abundance.

2. *Azalea Indica, lateritia*, Brick-red Chinese Azalea. Pentandria, Monogynia. Ericææ. A new and beautiful Chinese variety, introduced by Mr. M'KILLIGAN, along with the lovely variegated kind, and with it was purchased by Mr. KNIGHT, nurseryman. The plant is remarkably bushy; its foliage is a rich deep green, to which a slight rusty tinge is given by the numerous brown hairs of the mid-rib and margin; the leaves are narrow, very blunt, and remarkably covered with hairs, which give their surface a rough appearance; the flowers are of a bright clear brick colour, a little tinged with rose. The habit of the plant is entirely that of the variegated kind, and perhaps it is a mere sport from that variety: it is, however, very different in the colour of its flowers. It will no doubt require the same treatment as the other Chinese Azaleas, and will probably form as striking a variety as any of them, on account of the peculiarly bright colour of the flowers.

3. *Orchis foliosa*, Leafy-spiked Orchis. Gynandria, Monandria. Orchideæ. A fine species of Orchis, native of woods and copses in Madeira; very much like the European *O. latifolia*, from which it differs in being larger in all its parts, having a distinctly three-lobed flat lip, instead of a lozenge-shaped convex one, a shorter and more slender spur, and a taller stem. It has been for some time cultivated by Messrs. YOUNG & PENNY, of Milford, near Godalming, whose collection is so rich in Canary plants. It succeeds, we are informed, extremely well either in well-drained pots, or a turf pit, in a soil composed of the turfy portions of heath mould, with a mixture of moss and sand. Like many others, this species varies with spotted and spotless leaves. In this country it flowers in May.

4. *Maytenus chilensis*. (Description deferred for want of room.)

5. *Rhodanthe Manglesii*, Captain MANGLES's Rhodanthe. Syngenesia, Polygamia Æqualis. Compositæ. A charming green-house annual, introduced from the Swan River Colony in New Holland by Captain MANGLES, R.N. It first flowered in the beautiful collection of ROBT. MANGLES, Esq. of Sunning Hill, in 1833, and whence it has since been liberally distributed. In token of its beauty, it received the distinction of a medal at one of the great exhibitions in the Garden of the Horticultural Society. Its season of perfection is May and June, at which time there is nothing in the gardens that equals it in beauty, for it possesses the brilliancy of the Cape *Helichrysa*, without their stiffness and formality. In July it becomes shabby, and by the beginning of August its seed is ripe and its life departed. It requires to be treated as a tender annual, and to be kept in a cool green-house during its time of growth; too much heat seems to be particularly offensive to it. *Rhodanthe*, from *ῥόδον*, a rose, and *άνθος*, a flower; in allusion to the colour of the flower buds.

6. *Gilia tricolor*, Three-coloured Gilia. Pentandria, Monogynia. Polemoniaceæ. A very handsome species, quite hardy, and will grow in any kind of soil. The colour of the flowers is white, changing when old to a pink, crimson, and yellow.

7. *Lupinus nanus*, Dwarf Lupine. Diadelphia, Decandria. Leguminosæ. We have no prettier annual than this little Lupine, which has recently been introduced from California by the Horticultural Society. It forms a low

tufted plant, from six to twelve inches in height, producing a succession of upright shoots, terminated by several tiers of flowers, which continue to open in succession for two months. The colours being bright purple, intermingled with white and rose, a gay variegated appearance is produced, which is extremely agreeable when the plant is grown in masses. It is well adapted for covering flower beds, or for forming a compartment in a parterre, or for the edge of a small clump, or in short for any purpose which requires neatness, and a protracted blooming. If sown in the autumn, it will flower in May and June; if sown in spring, it will be in beauty in August and September; and by deferring the period of sowing till the beginning of June, it may be made to blossom as late as November.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERY.

ON HEPWORTH'S LEADER CARNATION.—Can any of your readers inform me where I can buy Hepworth's Leader Scarlet Bizarre Carnation, and the price per pair?

INNOVATOR.

REMARKS.

RETROSPECTIVE NOTICES AND ANSWERS, BY SNOWDROP.

ON CHRYSANTHEMUMS FLOWERING IN JUNE.—(GULIELMUS, Vol. II. p. 115).—It seems to be a question whether MILLER was acquainted with any variety of the true *Chrysanthemum Sinense*. The *Matricaria Indica* presented by him to the Royal Society "is preserved in the British Museum. It is small and not very perfect, but no doubt would be entertained that it is referable to one of the varieties of the Chinese Chrysanthemums (perhaps the Rose or Buff), did not MILLER's account of the plant in his Gardener's Dictionary, entirely disagree with almost every particular of the Chinese Chrysanthemum."* MILLER states that it blooms in July and ripens seeds in Autumn, which should be sown in Spring, and treated in the manner of a tender annual. This certainly *could not* be one of our present varieties.

I can give GULIELMUS no hope of success in flowering the Chinese Chrysanthemums in June. I have paid a great deal of attention to these plants, and have tried many experiments, as well as the one he mentions, without success. I have now plants several feet high of the *quilled pink, two coloured red, &c.* which did not flower last year, and which seem as far from flowering (on examination this morning, August 15th,) before the usual time as any others I possess.

CARNATIONS.—(A LADY N. Vol. II. p. 116).—Carnations are planted in large pots for the convenience of *layering*, and three or four plants are placed in each pot to make a shew of bloom, *Carnationists* generally allowing only the leading bud of each plant to flower. Single plants will, however, flower well in 32's, and even in 48's.

HYACINTHS.—(CHARLES K. Vol. II. p. 116).—I beg to inform CHARLES K. that though my Hyacinths bloomed very well last spring, yet they were not equal to what I expected. They certainly had not progressed during the last season in an equal degree to that of former years. This I attribute to the peculiarity of the weather. On taking them up, however, so far from a deficiency, I found a considerable increase both of size and number from the time of planting. But after all, perhaps, it is most prudent, particularly for

* Sabine, 4 Hort. Trans. 331.

careless florists who omit protection, or where they are planted in clumps, to take them up every year. Those who wish for very fine trusses, must be content to enjoy it once in three or four years, and in the intermediate seasons pinch off the blooms before they expand.

LOBELIA FULGENS.—G. H. (Vol. II. p. 174) has given a useful article on the cultivation of *Lobelias* in pots. With respect to *L. fulgens*, I beg to say that with me it has proved perfectly hardy, and flowered very fine in the open border, and all the management required seems to be, to take up the old roots in March, separate the suckers and plant them in rich mould, and supply them all the summer with plenty of water.

LILY OF THE VALLEY.—(FANNY ENYAM, Vol. II. p. 186).—If this Lady's garden happens to be located near London, in a confined situation, or if the soil of her garden is very rich, or very dry, she may despair of blooming this plant. The converse of these will no doubt have the desired effect.

BALSAMS.—(C. Vol. II. p. 187).—Balsams only come double from old seed. It should be kept from three to ten years—so florists say. To EMILY ARMSTRONGE (Vol. II. p. 189) I would say that I am perfectly aware that Balsams are tender, and if she refers again to Vol. I. p. 105, she will be convinced of it.

COMPOSTS.—(H. S. Vol. II. p. 187).—If H. S. procures good loam, very rotten horse or cow dung (quite mould), silver or white pit sand, and peat or heath mould, he will have all the ingredients necessary for Composts for almost every plant that grows. The proportions must of course be adapted to the nature and necessities of each particular plant.

FUCHSIAS.—MR. W. BARRATT (Vol. II. p. 176) has "done the florist some service" by his enumeration and detail of treatment of this beautiful genus, which is certainly the delight of all beholders. To extend this pleasure to the cottage, and even to the hut, I beg to say that slips root readily of most of the varieties from March throughout the summer if planted in a shady situation in common garden soil, with or without a hand glass, and kept moderately damp. When rooted the plants may be potted or placed in the open border or against a wall, a little litter round the roots enables them to stand the winter. *F. gracilis* and *macrostema* are very hardy. Fuchsias thrive well and form beautiful objects when planted at the foot of, and nailed against, a south or west aspect wall. *F. gracilis* and its congeners seem best adapted for wall training.

INNER TEMPLE GARDEN, LONDON.—This garden is a specimen of very high keeping. The flower borders present an extremely judicious display of flowering plants, though not quite *à la Loudon* (variety without mixture). The health of the plants is also a subject of admiration, considering the situation of the gardens in the centre of London. But what is particularly noticeable is, that the ground work of the borders is entirely filled up with *mignonette*, which not only delights the eye, but regales the sister sense in an eminent degree.

DAHLIA.—This plant, even the dwarf varieties, generally grow too large for the parterre to which they are, however, an almost indispensable addition. To keep them within bounds, shoots struck as soon as they are fit in 60's, afterwards shifted into 48's, and then the pots plunged where they are to remain, will bloom well and yet continue dwarf plants. SNOWDROP.

REFERENCE TO PLATE.

1. *Jane Ann's Favourite, Heartsease.*—Specimens of this very striking and lovely Heartsease, along with many others equally as handsome and striking, were sent to us by MR. MAJOR, landscape gardener, Knowstrop, near Leeds. The colours of some of the kinds were very rich and uncommon, as are those of the one we now give. One of the kinds, named "Negro Boy," is the best dark we ever saw.

2. *Calceolaria Harrisonia*, HARRISON'S Slipper-flower. Diandria, Monogynia. Scrophulariæ. This very handsome variety was also raised by MR. MAJOR, who sent us specimens of this and several other beautiful va-

rieties, raised this year, engravings of which we shall give ere long. We understand Mr. MAJOR intends sending the whole out by name next spring. It was named in compliment to us by Mr. MAJOR.

3. *Lophospermum Rhodochiton*, Purple Lophospermum. Didynamia, Angiospermia. Scrophularinæ. "This very beautiful new climber is a native of Mexico, and was introduced to Germany about two years ago, and from the Royal Botanic Garden, at Berlin, it has found its way into collections in this country. Professor ZUCCARINI has named it *Rhodochiton volubile*, but we have been unable to find any description of it by that botanist. The plant is clearly a legitimate species of *Lophospermum*, and differs in no respect from the other two species, both also natives of Mexico, except in its less deeply divided calyx, and in the more cylindrical tube of its corolla."—D. DON. We find the plant to be quite as hardy as the *L. erubescens*, and to require altogether the same kind of treatment as that species.

FLORICULTURAL CALENDAR FOR OCTOBER.

PLANT STOVE.—Continue to admit portions of fresh air into the house every fine calm day, from ten o'clock in the morning till two or three in the afternoon. Fires will now begin to be required, keeping the internal air at nights to about 60 degrees Fahr. Plants of Cactuses that have been kept in the open air or greenhouse, now put into the stove will bloom immediately.

GREENHOUSE PLANTS.—Those plants that were removed into the greenhouse last month, should have plenty of air given them every mild day; but the lights should be close shut up at night, also when cold, damp, wet, or other bad weather prevails, excepting a little at the doors about the middle of the day. Camellias, if wanted to flower early, should be placed in a stove.

FLOWER GARDEN, &c.—Auriculas, must now be removed to their winter habitation, all dead leaves must be picked off as they appear, or the plants will be liable to injury from rotting, &c.—Carnation Layers potted off, should be placed for protection during winter. Offsets of the herbaceous kinds of Calceolarias, should now be potted off, having well drained pots, and a light soil. The plants may be kept during winter, in a cool frame, or a cool greenhouse; very little water must be given them, or they will damp off. Cuttings of all kinds of greenhouse plants that have been grown in the open border, in beds, &c., such as Heliotropes, Geraniums, Shrubby Calceolarias, &c., should be taken off as early as possible in the month, and be struck in heat, in order to have a supply for beds, &c. the next year. If frost is likely to cut off the tops by the end of the month, the plants should be taken up, and placed very closely in boxes, large pots, &c. for preserving during winter. Water freely after potting off, but little afterwards at the roots, till the plants have struck root, they may occasionally be sprinkled over the tops. Do not place the plants in heat, to cause them to strike, for if this be done, most of the plants will fail, a cool ground, or greenhouse is suitable. Hyacinths, and other bulbs, should be potted early in the month, for forcing, &c. Seeds of Schizanthus, Stocks, Salpiglossis, and similar kinds of plants, desired to have in flower early next season, should be sown the first week in the month in pots, and be kept from frost during winter. Seeds of Pansies should be sown early in the month, in pots, and be protected in a cool frame; also plants be taken up and protected, unless they be grown in a sheltered dry situation. Pinks, if not already planted off, should be done early. Perennial and biennial border flowers may be divided, and planted off where intended to bloom next year. Flower beds, borders, &c. should be dug, and an addition of fresh soil be laid in them so as to raise the surface, that the roots of all plants may be covered and be a protection during winter; this should be attended to by the end of the month. Any tender kinds of border plants that are liable to injury during winter should be potted and be placed for protection. To Dahlias, a cover of soil round the roots should be given, lest a sudden frost coming should injure the crown buds; seed should be collected, before damaged by frost. Seeds of all kinds of flowers not yet gathered, should be collected early in the month, or they will be liable to injury from frost.



Duke of S. Albans' Pink



Delphinium Chinensis
var. albiflora.



Gilia tricolor



Tropeolum majus, var. *Shillingii*.

J & J. Parkins

THE
FLORICULTURAL CABINET,

NOVEMBER 1st, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*Several Experiments in Striking Cuttings of Plants in Water.* By the Author of the “Domestic Gardener’s Manual,” C.M.H.S.

I am not a florist—that is, I do not profess to be an adept at, or passionately fond of, the culture of the several species of flowers which florists exhibit; but I delight in beautiful flowering plants, whether they be shrubby or herbaceous: hence I am anxious to discover ready and effectual modes of propagation. I do not object to the usual methods of raising plants; on the contrary, I constantly practice them: but if I can also bring the vital principle into action by any unusual plan of operation, and retain it in uninterrupted vigour without check, I am more gratified than if I had practised merely the usual routine.

It has long been known that some cuttings will emit roots into water, if bottom heat be maintained; and numbers of persons have thus raised Oleanders. By comparing that fact with the singular production and vast extension of Melon roots, which had protruded a single fibre through a water-tight joint of a brick wall, into a small tank built upon a flue, I was led to try experiments freely with cuttings of Melon and Cucumber shoots, and clearly ascertained that I rarely failed to strike any cutting, whether taken at a joint or not, and that in a few days: I even struck a Cucumber in November 1833. But though some plants will emit roots late

in the year, I have observed, as a *general* phenomenon, that the rooting process proceeds best, and with the most vigour, in May, June, and July.

If a few ounce, or ounce-and-half, phials be filled to within half an inch of their necks with clear rain, river, or even well water, and then placed in a sunny window of a green-house, or hot room of a house,—or, what is better, over a hot-bed, or plunged in a bed of leaves, or tan, where a steady temperature of 70 or 75 degrees exists,—most of the plants now to be named will emit roots within the periods of from four to twenty-one days :—

Balsamina—the Balsam, in three or four days.

Cucumis—the Melon, Cucumber, and doubtless all the species, in a week or ten days.

Calliopsis lanceolata—late Coreopsis, in a fortnight.

Alonsoa—late Celsia urticifolia, not exactly noted, readily.

Zinnia coccinea—fourteen days.

Heliotropium peruvianum—ditto.

Gloxinia and *Gesneria*—leaves with buds at the base, or cuttings at a joint : several species : gradually. The process is exceedingly curious : a bulby protuberance first forms ; a few silky fibres then diverge, and become an inch or more long ; and finally, though the young bud merely lives, yet it does not decay under water. The plants in this state take to soil without any delay.

Petunia phanicea and *integrifolia*—about ten days.

Salvia fulgens, *splendens*, *angustifolia*, and several others—soon.

Justicia speciosa and *carnea*—readily.

Turnera trioniflora—will root and flower.

Aloysia citriodora, late Verbena triphylla.

Ruellia formosa.

Melastoma carulea—in a few days.

Thunbergia alata—cuttings of two upper joints—very soon.

Coronilla glauca—takes some time.

Fuchsia gracilis.

Erythrina laurifolia—after a certain period, previous to which detachable granulations, interspersed with air bubbles, form round and near the heel : these rise to the surface, like little masses of pith : finally, the radicles protrude.

Dahlia evinces the same secretions ; as yet roots are not sent forth.

Other subjects have been tried, but all have not been noted, nor have the exact dates of several of the final results. As I remarked before, I do not think that the old modes of propagation are to be discarded or discontinued; still, there is one great advantage which attends the mode of extension by water-cuttings, in so far as the minutest fibres are not injured by removal; and provided common care be used in placing the plant, at first, in very light rich soil, generally with a *little silver sand* about its roots, there will not be any shrinking or failure. In several species, particularly those of shrubby Calceolarias, if struck in pots, unless the whole ball be transferred, the plants dwindle, and frequently die. I have never found any torpor, if the precaution be observed of placing some of the tenderest species under a close striking-frame, keeping them excluded from air for a day or two.

The cuttings should be in a tender, herbaceous state, not woody; and I think that the method applies chiefly to tender, and even succulent species.

I do not address this paper to gardeners—to scientific experimenters: they are aware doubtless of all the circumstances recorded, and of many more; but *all* are not “*au fait*” of every particular; and where scientific instruction is not conveyed, nor indeed always called for, innocent and rational amusement is a thing worthy of some attention.

G. I. T.

September 2d, 1834.

ARTICLE II.—*On Raising Carnations from Seed.* By J. W. C.

Observing, in your *Cabinet* for July last, that several of your correspondents solicit some information on raising Carnations from seed, I am induced, as a tolerably successful cultivator of that delightful flower, to offer a few remarks.

Experience has proved to me the error of sowing seed from self colours, or those possessing bad properties, as, by repeated trials, I am satisfied that the only chance of obtaining superior flowers is to sow *your own* seed, produced from those acknowledged to be first-rate. The course I have adopted, and which I recommend, is, when the petals are dead, to pluck them out of the calyx, or

cup containing the seed-vessel, leaving the two styles, or what are generally called the horns ; by removing the former, the pods are kept dry, and more exposed to the sun and air ; they should at all times be protected from rain, by placing over them the shades used at the time of blooming ; and care should be taken that the vessels wherein the legs of your platform stand, are constantly supplied with water, to prevent the approach of those nocturnal enemies—earwigs. When the seed-vessels become hard, and present a brown appearance at the tip, they should be gathered, and in that state preserved, in a perfectly dry situation, until the following April or May, which is the period for sowing in pots or boxes filled with rich loam, taking care not to cover the seed more than a quarter of an inch ; give them a slight watering before they are plunged into a hot-bed of about 65 degrees ; occasionally moisten the surface with soft water, of the same temperature as the air in the frame ; and as soon as the plants appear, admit the air freely during the day-time, to prevent their being drawn up. When about three inches high, transplant into larger pots or boxes of rich turf mould, five inches apart ; place them in a southern aspect, at first protecting during the nights with matting, and applying moderate light watering in dry weather ; but invariably avoid wetting the plants, as too much moisture frequently decays the hearts of the shoots, and prevents their blooming the second year. In about six weeks again transplant them, a foot asunder, into beds prepared of good sandy loam, mixed with rich garden mould ; keep the beds clear from weeds, and water copiously in the evenings during the summer. By adopting the above course, the plants will be found exceedingly strong towards October, and require little or no protection in the winter ; but should any appear particularly weak and unhealthy, take them up, and after examining the roots, which is generally the seat of disease in plants, replant them in a different compost, and during the severe weather protect with pots raised about two inches upon pieces of tile. I have always found a long bed in the centre of a grass plot, about three or four feet wide, so as to admit of two or three rows, by far the best situation for seedlings, being more easily protected when necessary by mats or hoops, and decidedly less liable to be injured by snails, &c. In the following April let the beds be well cleaned, and the surface carefully loosened, to receive a thin top-dressing

of rotten manure, the application of which will be found materially to renovate the mould, as after so many months it necessarily becomes much impoverished. I am not, however, an advocate for planting seedlings in very rich compost, as it is much more practicable by cultivation to put colour into a flower, than to extract it. When the shoots are grown about a foot high, they should be supported by sticks; at this time they will also require to be frequently watered; and as they bloom, pull up all that come decidedly bad; the best, of course, should be piped or layered at the proper season.

Some persons sow the latter end of May, allow the pots to remain in the open air, and prick the plants out at once into beds. The disadvantage of this system is obvious: for, in the first place, they do not come up so soon; and, secondly, when planted in beds at so tender an age, they are rendered more liable to be destroyed by worms and slugs.

As regards impregnating Carnations, I am of opinion with many others, that the bees and insect tribe execute that work much more effectually than can be performed by the hand.

Should the above observations meet your approval, you will oblige me by giving them insertion in your very useful and valuable *Cabinet*. I have endeavoured to be as explicit as possible, and feel an apology is due to you for their length; but I was anxious to afford information to your inexperienced readers, and shall at all times be happy to give them the benefit of any discoveries resulting from my own practical exertions.

J. W. C.

Buckingham, Sept. 8th, 1834.

ARTICLE III.—*Hints to Juvenile Gardeners.* By the Author of “*Rival Crusoes.*” Communicated by GULIELMUS.

After your piece of ground has been cleared, dug, and raked smoothly, it must be neatly chopped round with the back of the spade, properly guided by a garden line, fixed even and tight, just above the level of the ground. This may be made of whipcord, fastened at each end by a prong of wood, large enough to keep it

steady. When this is done, you may consider what the border is to consist of. Some prefer, as a garden border, what the agriculturists call a dead fence: and this may be made of bent Oziers, or other flexible sticks, put round your ground in little arches; or it may be framed; or stones, or bits of tile, or wood, placed regularly. Others like better what is called a live fence; and this may be made of Daisies, Thrift, Stonecrop, turfs of Grass, or Box. I own that I much prefer a union of both a live and dead border. A pretty edging may be made with large white sand stones, which are found on the sea-beach, and may be easily collected by those who live near the coast. In place of these, the odd-shaped flint stones, that are to be found in almost every clay, gravel, or chalk pit, if placed round a little plot of ground with taste, form no unpleasing border. These must be half-way bedded in the earth, or they will not hold firm, and an edge of plants proper for the purpose must be placed just within the row of stones; the roots of the plants will bind the stones tight in the ground; and the whole looks well together.*

The Stonecrop is called, in some countries, gold dust, and in others, wall-pepper; it is one of the numerous tribe of Sedums. Like the House-leek, it grows on the tops of walls, which it covers with its bright golden blossoms; the leaves are little thick three-cornered knobs, and have, if bitten, a very pungent, hot taste; it grows wild on many parts of the coast, and there are three varieties of the same plant, yellow, pink, and white. Its advantages as a border are, that it is very small—grows thick, and close to the ground—is a long time in flower—and blossoms a considerable time: like the rest of its tribe, it is apt to spread too much; this defect is easily remedied, by the edge being now and then cut with a knife. Double Daisies form a charming border, and they are seldom out of flower at any time of the year.

Thrift is likewise useful for this purpose. One of the varieties is a very bright carmine pink—this is rare; the common is lilac; some I have gathered in the salt marshes, of a pale flesh colour. Like the Stonecrop, this is a marine plant. If the seed-vessels of the Thrift are cut down when the blossoms fade, more flowers will

* Short stakes driven into the ground, at a few inches apart, to which plain or striped-leaved Ivy, &c. is trained, make a very neat fence for beds of Hollyoaks, Dahlias, &c. Or Larch, Yew, Holly, Arbor Vitæ, &c. kept clipped a foot high, answer well.—ED. CAB.

spring, and your border always look neat and pleasing. Box is not so desirable, as it is a long time growing, and produces no flowers. Grass bordering is very well on a large scale, but it is difficult to be kept in order without the scythe.

Now we have provided the border, let us give some consideration to the interior.

These little plots of ground are best suited to the cultivation of small and delicate plants ; and care must be taken that what is put therein is not suffered to increase and spread too much, so as to draw all the nourishment from its neighbours. It should be one of the amusements of youthful cultivators, to remove carefully any superfluous suckers from the plants under their care, leaving only two or three stems, which will be far more vigorous and beautiful than if the plant is left to throw out eight or nine. There is, beside, more room for variety. It is likewise desirable to know what plants grow and blossom freely in the shade ; as some change their colours, become sickly, and actually die, if planted under a tree, or beneath a north wall.

Polyanthuses, Violets, Primroses, double and single Cowslips and Snowdrops, not only flourish in the shade, but prefer it. So do the whole tribe of the Narcissus, the beautiful Lily of the Valley, Grape Hyacinths, Blue-bells, and Cyclamens. This last is well worthy of attention ; it is a scarce, but a remarkably beautiful flower, and singular in all its habits. I do not mean the large Persian Cyclamen, that is commonly seen in pots, in the spring of the year, a costly and cherished inhabitant of the green-house,—but a small English species, that grows wild in many parts of England. It has a large, oblong root, as large as the largest Potatoo, and when cut it has the appearance of the flesh of that root. The Cyclamen has no footstalk, but every flower and leaf ends in a radical filament, by which it is fastened to the large fleshy bulb that is its principal root. The leaves are, perhaps, more beautifully marked than any other vegetable production ; they are irregularly heart-shaped—large—of a dark green,—figured all over with a variety of the most beautiful patterns, in light green, black, and white ; the reverse of the leaf is of a bright carmine colour, veined, and shaded with light green. The flowers are delicate, and worthy of the closest examination. Some are white, shaded with lilac at the bottom ; and another sort is bright

lilac, shaded with crimson in the same manner. They are shaped like little mitres, and grow very close together, though their stalks are not united. The flowers spring up after the old leaves die away, and form a most beautiful group in the autumn. Their favourite residence is at the roots of an old tree. The seeds are likewise worthy of remark. They, of course, take the place of the flower, and the seed-vessel grows to the size of a small nut, of a dusky-red brown; but, what is perhaps the most curious of the habits of this singular plant, when the seed is ripe, the stalk, which supported the flower, and was before very straight, now begins to curl itself round like a corkscrew, till it gets close to the earth, and even deposits the ripe seed therein, as if for the purpose of taking root!

Among small shrubs, the dwarf Almond, all the species of the Mezereon, the Victory Laurel, and the small kind of the *Laurustinus*, will flourish in the shade; but above all, the Chinese, or Monthly Rose, will produce its long succession of beautiful buds and blossoms better in a cold shady place than in the full blaze of sunshine. It is desirable to know that this charming flower grows very readily from cuttings, if the slips are planted in the months of June, July, or August. All kinds of the deciduous or Summer Rose are propagated by parting the roots; but this, which is nearly evergreen, is only multiplied by pieces cut from the bush,* as it never throws up suckers. Whenever the wood of a Monthly Rose plant looks rough, scraggy, and unsightly, it is a good plan to cut it down level with the ground or pot, then divide the branches you have cut off into many slips, leaving on each two or three joints. Place these in very moist loose earth, having one joint out of the ground, and one or two beneath it; because, leaves will spring from that part of the slip that is exposed to the air, and roots from the others. The shade of a wall is the best situation for these. The slips must be well watered, and in a few weeks new leaves will appear (a sure sign that the plants have taken root), and the slip will often bear buds and flowers before the end of autumn; these, however, should be nipped off, as they weaken the young plants. They will stand the winter very well, and be fine little Rose trees in the spring, fit to pot; thus, from the refuse of an old

* Also by buds, grafts, or inarched.—ED. CAB.

plant, a great number of young Roses may be reared. This operation, too, is attended by the greatest benefit to the plant that is cut down, as it will throw out many strong shoots, of a beautiful deep red, which will thrive with astonishing rapidity, and produce larger and fairer Roses than any that grow from old wood. The Scarlet Monthly Rose, of every variety, both double and single, may be reared in the same manner.

The Anemone is a costly flower, whose roots always bear a high price. It is a common, but, as I have often proved, a very mistaken notion, that if this plant is reared from seed, it requires four or five years of constant attention before the seedlings blossom. If the seeds, which appear like tufts of cotton mixed with dark specks, be gathered, and sown in a box full of light fine earth directly they are ripe, they will soon come up, with two pointed, long, slender leaves, and before the autumn is over, these will be succeeded by the leaves usual to the perfect plant, which are beautifully cut in many divisions—something like parsley-leaves, but finer. The whole plant then dies down for the winter; and the roots, if examined, have the appearance of small lumps of earth, and are very difficult to find; for this reason, they are best sown in a box, as they are liable to be lost in the open ground. It is desirable to leave the box undisturbed—only, let it be carefully weeded. The young Anemones will make their appearance in the spring, and seldom fail of blowing the succeeding autumn, when they are a year old. I have known some, when they liked the ground, even bloom the spring after they were sown. After they have blossomed, the plants will die down, and the roots must be carefully dug up, and if left undisturbed in the border, will increase very fast.

It only now remains to say a few words to those who love plants, and are not so happy as to dwell in the country to enjoy them. All plants in London need just twice as much water as they do in the country; because, the acrid nature of the smoky atmosphere naturally dries up their moisture. The leaves should likewise be sponged, when they are covered with dust or blacks. Geraniums and Monthly Roses are the plants most desirable for a London veranda, because if watered every day, and placed level with the light, they produce a constant succession of leaves and flowers. Hydrangeas, both the pink and the curious blue variety, are

flowers often seen in the metropolis : if properly treated, they retain their beauty many weeks, but they are generally starved for want of water. The Hydrangea is a native of a marsh, and will grow luxuriantly half immersed in water, therefore its pot ought to be plunged in a large pan, constantly kept full of water ; the plant will then thrive and flourish, even in London. Pinks, Carnations, and Stocks, though favourite flowers in the windows of the metropolis, it must be remembered, yield no second produce of blossoms ; they bloom but once in the year, and their beauty lasts only a short time. It must be observed as a constant rule, both in town and country, to remove instantly all faded blossoms, as well as dead leaves ; the plant is then kept in health, and is not exhausted by bearing seeds.

And now, wishing my young friends flourishing gardens, and a profusion of beautiful blossoms, I bid them farewell.

ARTICLE IV.—*On the Destruction of Plant-lice and Frog-hoppers.* By SNOWDROP.

The plant-lice (*aphis*) have abounded this year in an unusual degree, to the great injury of plants of every description ; and various means for their destruction have, no doubt, been tried. It is very desirable that any successful method should be made known ;—not in vague language, but stating the proportionate parts, if a mixture, and the number of times it has been used before the desired object has been attained. In the use of the usual remedies recommended, that is, tobacco-water, (which, I think, may be injurious to plants), and fumigation with tobacco-smoke, I have not been successful ; nor has camomile, which has been so strongly recommended, either in decoction or powder, had the desired effect. It is possible, however, that I have not applied these remedies in a proper manner. By camphor-water, however—half an ounce of pounded camphor in a pint of water allowed to stand for a week—and applying it several times in the evening with a large camel-hair brush, I have managed to keep my Carnations nearly free from this pest. As this insect has lately attacked Tulips in their place of rest, I should recommend camphor to be placed in the boxes or bags, and renewed once or twice until planted.

The larvæ of the frog-hoppers (*Tittigonia spumaria*) has also been very abundant, and their destructive effects very visible;—a successful plan for keeping them off plants, or for destroying them, would also be valuable. The only method by which I can get rid of them is, to pick the *larvæ* out of the froth and kill them at once, which is very tedious work. The death of one perfect insect may prevent the ravages of a hundred *larvæ*.

SNOWDROP.

ARTICLE V.—*On Plants which are peculiarly adapted for Planting in Beds in Masses; each kind being showy and profuse in Flowering.* By FLORA.

(CONTINUED FROM PAGE 229.)

Bouvardia triphylla. Tetrandria, Monogynia. Rubiaceæ. There are three varieties of this species, viz. Jacquini, glabra, and pubescens, all of which kinds are very handsome flowering plants. The flowers are of a fine scarlet, and in shape like the Trumpet Honeysuckle, and the blossoms are produced in clusters of from six to twenty in each head; and some plants which I have a bed of, produced this season thirty-five clusters or heads of flowers upon each. The plant is a native of Mexico, and is usually kept in the greenhouse in this country, but I am of opinion that it may be found as hardy as the old *Fuchsia coccinea*, and stand our winters in this part of the world. It will, however, be necessary to have it planted where it will have a very dry subsoil, and likewise to have protection, in winter over the roots, by means of leaves, tan, or something of this nature. I purpose trying my bed of plants the coming winter, and the result shall be forwarded you next summer. I have employed this plant for a bed for the last three years, and purchased in the first instance, two dozen plants at 1s. 8d. each. I had previously grown this plant, from which I propagated young ones with facility, but I found that it required two or three years' growth before they became bushy enough to make show fit for a bed. I therefore, resolved on getting fine plants calculated to answer the purpose at once; and these I obtained of a Nurseryman, at the above named reasonable charge. The same plants will successively answer for the length of an age,

and in each season increase in size and beauty. The plan I adopt in the culture of this plant is the following :—The soil of the bed is composed of good rich loam, well manured with rotten leaves, a portion of old hot-bed dung, and charcoal dust, with an addition of river sand. Previous to laying in the compost, I had the bottom of the bed covered to the depth of three inches with some small gravel stones, upon which I had the compost about eight inches deep, the surface being raised above the walk and grass verge, four inches. On or about the twentieth of May each year, I turned out the plants with balls entire, except a careful loosening of the outer fibres. I placed them in the bed, a round one, the tallest in the centre, and lowest at the outer row, and so close that the plants furnish a covering to the bed, and when in bloom appear a mass of flowers. I place the plant so low in the soil that the top of the ball is about an inch below the surface of the bed. After planting and before watering, I placed from four to six sticks round each, and to them secured the branches—then water them freely. The watering was repeated frequently during the summer season, more particularly the present one, and the plants have most amply repaid for the attention, nothing exceeding the delicate splendid appearance of the flowers, and which continue from June to October. The plant in the greenhouse attains the height of two feet or upwards, but in the open bed it does not exceed more than eighteen inches (generally about twelve) ; the plant being allowed to root or spread without obstruction, becomes bushy instead of being drawn up weakly. About the middle of October, I usually take up the plants from the bed, and repot them into the same kind of soil, well draining the pots, and being careful to have fine soil to shake in among the fibrous roots. I have also kept the plants through winter by having them planted in a Mignonette box, closely together. In both instances, I kept them in winter in a cool frame, sunk below the surface of the surrounding ground, in which for the last two winters they have kept well. Cuttings strike freely in loam and sand, placed in a hot-bed frame. Suckers are readily obtained, many of them rooted, which grow readily.

Senecio elegans, Ragwort, or Double Groundsel. Syngenesia, Superflua. Jacobææ. There are four kinds of this plant, viz. double red, double crimson, double white, and double flesh-coloured. Each of these kinds will make a most handsome bed. The plant

is very pretty in its foliage, grows freely, and most profusely; scarcely any thing surpassing it for a neat and handsome show. It will grow about 18 inches high, and continue in bloom from June to the end of the season. The soil I grow it in very successfully is fresh loam mixed with leaf mould, and about eight inches deep, upon a dry subsoil. I find that when the soil is much enriched, the plant has a tendency to produce too much foliage; but, grown in turf, loam, &c., as above stated, an amazing production of bloom is the result. The plant is readily increased by slips, scarcely one in a hundred failing to grow. I raise them in pots, or under hand glasses, in fine sifted loam. They require winter protection in a dry, cool frame, or green-house. I usually take off slips in September, and keep them in the cutting-pots till March, then separate them, and pot into small pots. I turn them out entire, about the middle of May, into the beds.

(TO BE CONTINUED.)

ARTICLE VI.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

(CONTINUED FROM PAGE 230.)

NAMES.	DESCRIPTION.
688 Therese de la Chine	Blush anemone.
689 ——— minor.....	Small red.
690 ——— nouveau	Bluish purple.
691 ——— superbe	Fine crimson.
692 Tinwell Surpassante	Crimson purple.
693 Tombeau de Napoleon	Small crimson purple.
694 Toute à faite à l'Anglaise	Large purple crimson.
695 Transcendant	Bright pink.
696 Translucens.....	Pale mottled red.
697 Transparent Pink	Splendid.
698 Trafalgar	Large deep scarlet.
699 Tres Charmante	Fine bright pink.
700 Tricolor	Changeable red and white.
701 ——— de Napoleon	Beautiful striated red and yellow.
702 ——— superbe	Crimson, purple, and velvet shaded.
703 Triomphe de la Faye	Fine crimson.
704 ——— ville	Light pink.
705 ——— Londres	Fine blush.
706 ——— Napoleon	Fine red and blush.
707 ——— Rouen	Large deep blush.
708 ——— des demoiselles	Beautiful dark purple.
709 ——— Royale	Light crimson.
710 Tunia	Crimson.
711 Turban.....	Crimson purple.
712 Tuscany	Semi-double dark purple.
713 Umbrella	Semi-double blush.

NAMES.	DESCRIPTION.
714 Unique.....	Deep blush.
715 ——— panache	Delicate white, striped with rose.
716 Valeroi	Large fine blush.
717 Valmorea	Light red.
718 Variegata	Red and pink.
719 Varni.....	Fine scarlet.
720 Veirge Royal	Curled blush.
721 Velours	Velvety purple.
722 Venus.....	Small delicate red.
723 ——— New	Fine light pink.
724 Vesuve	Velvety crimson.
725 Vesuvius	Large fine red.
726 Vibert.....	Large red.
727 Victorie nouvelle	Large purple.
728 ——— triumpante	Flaming red.
729 Victory	Brilliant red.
730 Vienne Charmante	Small scarlet, pretty.
731 Vierge Blanche	Blush white.
732 ——— Blanchede Montrieul.....	Delicate blush.
733 Vierginite	Pale blush, small.
734 Vilmerin.....	Bluish purple.
735 Village Maid.....	Beautiful striped rose and white.
736 Violet	Fine purple violet.
737 ——— Antonia.. ..	Deep purple.
738 ——— bleu.....	Beautiful purple.
739 ——— Brillante	Fine bright purple.
740 ——— imperiale	Fine rosy purple.
741 ——— Jacques.....	Small dark purple.
742 ——— nouveau.....	Fine velvety purple.
743 ——— picotee	Beautiful crimson violet, spotted with white.
744 ——— superb.....	Nearly black.
745 ——— triumpant.....	Fine violet.
746 Von Weber	Dark scarlet and purple.
747 Vulcan	Large red.
748 Waterloo.....	Bright red.
749 ——— reale.....	Exquisitely fine crimson, tinged with purple.
750 White, Dutch	Small white.
751 William Alfred.....	Red.
752 ——— Tell	Semi-double, large purple.
753 ——— the Fourth.....	Fine large cherry blush.
754 Wood's Superb Globe.....	Fine red.
755 Xenophon	Small purple.
756 York and Lancaster	Rose and white striped.
757 Zephyrus	Semi-double red.

MOSS ROSES.

758 Blush	Fine.
759 Common	Blush.
760 Couleur de Chair.....	Pretty flesh-coloured.
761 Curled Leaf.....	Fine red.
762 De la Fleche	Semi-double pale red.
763 Escarlate	Bright ecarlet.
764 Moss à fleur pointer	Pinkish long buds.
765 Moss-leaved	Semi-double red, all moss.
766 Perpetual White	Fine clear white.
767 Pompon	Small bright pink.
768 Prolific	Large fine globe blush.
769 Ross's Seedling	Light red.
770 Sage-leaved	Bright red.

NAMES.	DESCRIPTION.
771 Virginal.....	Large pale blush.
772 White	Fine double white.
773 Wild's	Small white, pretty.
CREEPING AND RUNNING ROSES.	
774 Adelaide d'Orleans	Fine deep pink.
775 Banksia White.....	Beautiful small, in clusters.
776 ——— Yellow	Do. do.
777 Double Ayrshire.....	Small blush.
778 Grevillea	Fine deep pink, in clusters.
779 Macartany	Single white.
780 Multiflora Italian	Semi-double red.
781 ——— rubra	Fine red, in clusters.
782 ——— alba.....	Fine white, do.
783 Musk, double	White.
784 ——— single	Ditto.
785 Red Bourseau	Beautiful semi-double red.
786 Rose de Lille	Beautiful very large blush, in clusters.
787 Ruga	Beautiful pink, very sweet.

(TO BE CONTINUED.)

PART II.

EXTRACTS.

Plants figured in the following Periodicals for October :—

Curtis's Botanical Magazine. Edited by W. J. HOOKER, LL.D.

F.R.A. and L. S., and Regius Professor of Botany in the
University of Glasgow. Price 3s. 6d. coloured ; 3s. plain.

1. *Mimulus roseus*, Rose-coloured Monkey-flower. Class, Didynamia ; order, Angiospermia. Natural order, Scrophularinæ. This beautiful species produces flowers of a fine rose-colour, in size fully equal to those of *M. luteus*, and clothed with a viscid down which yields as powerful a smell of musk, especially towards evening, as the well-known *Mimulus moschatus*. It inhabits Northern California, where it was discovered by Mr. DOUGLAS. It is equally as hardy as any other species, and may be increased either by seeds or by cuttings.

2. *Silphium perfoliatum*, Perfoliated Silphium. Syngenesia, Polygamia Necessaria. Compositæ. The genus SILPHIUM contains fourteen or fifteen species, mostly of a stately character, all inhabitants of North America, and in general confined to the Southern States. The present species is perfectly hardy in our climate, and produces its very large yellow flowers during the months of July and August. Silphium, from *Silphi*, or *Serphi*, a name said to be given to a plant in Africa, which yielded the *Laser* of the Romans, a kind of gum, but which seems to have no connection with the present genus.

3. *Silphium trifoliatum*, Worl-leaved Silphium. This is a less showy plant than the preceding species, having smaller and paler coloured flowers, and leaves more resembling those of several species of Sun-flower.

4. *Jambosa vulgaris*, Rose Apple. Icosandria, Monogynia. Myrtacæ. The *Rose Apple*, a native of the East Indies, is one of the commonest garden

trees of Madeira: but there is scarcely another that combines so eminently the beauties of flower, fruit, and foliage. The delicate white tassel-like bunches of flowers, contrasting with the thick, dark foliage, enliven the trees from February to July or August, when the fruit is principally in season. The fullest bloom, however, is in March or April. Nothing can exceed the loveliness and delicate appearance of the fruit; its rich clusters half hidden by the dark thick tufts of foliage which clothe the outward branches; but though one or two may be eaten with some relish, the overpowering perfume and taste of rose-water, together with the want of juice or dryness, render it generally unpalatable; and it is entirely excluded, except to satisfy occasional curiosity, from the table or dessert. It is produced in the greatest profusion, but used for no other purpose than sometimes to feed the pigs, which eat it greedily. This tree, by its thick, evergreen foliage, is admirably adapted for a screen to exclude buildings, or for shelter. It is also of rapid growth, and extremely tractable, bearing lopping well, or heading down to any height; and produces its flowers at all ages or sizes, whether as a tree or bush. *Jambosa*, from the Indian name *Jamboo*, or *Schamber*.

5. *Calandrinia discolor*, Two-coloured-leaved Calandrinia. Polyandria, Monogynia. Portulacææ. The flowers of this beautiful species, are something similar to those of the *C. grandiflora*. (See Vol. II. plate 2.) It will succeed well if treated as a greenhouse plant, or better still if planted during the summer months in the open border, where both the flowers and foliage will attain a larger size and a brighter hue. It flowers throughout the months of July and August.

6. *Acacia brevipes*, Short-pedicelled Acacia. Polygamia, Monœcia. Leguminosæ. A hardy conservatory plant, usually flowering in the earliest months of the year, the flowers are small and pale yellow. It is said to be a native of New South Wales.

7. *Stanhopea eburnea*, Ivory-lipped Stanhopea. Ginandria, Monandria. Orchidææ. A no less peculiar, though far less beautiful plant than *Stanhopea insignis*. It is a native of Brazil, a country pre-eminently rich in the tribe of Orchidææ.

Edwards's Botanical Register. Edited by JOHN LINDLEY, Ph.D., F.R.S., L.S., and G.S., Professor of Botany in the University of London, &c. &c. Price 4s. coloured; 3s. plain.

OMITTED IN OUR LAST.—4. *Maytenus chilensis*, Chilian Mayten. Syn. *Celastrus Maytenus*, *Celastrus uncinatus*. *Maytenus boaria*, *Maytenus chilensis*, *Senecio Maytenus*. Polygamia, Monœcia. Celastrinææ. A handsome evergreen shrub, which has been growing in the garden of the Horticultural Society. The leaves are smooth, oval lanceolate, flowers axillary, in clusters, small, of a greenish white colour, succeeded by yellowish berries. The plant succeeds best trained to the front of a south wall, but it also survives the winter without even that slight protection. It would, no doubt, prove perfectly hardy in the milder parts of England and Ireland. It is a native of Chili, flowers in May. *Maytenus*, from *Mayten*, the vernacular name among the Chilenos.

1. *Ceropegia elegans*, Elegant Ceropegia. Pentandria, Digynia. Asclepiadææ. It is a small twining plant, with dingy purplish brown stems and leaves, and livid flowers blotched with purple. They have little beauty, except when they are open; at that time their orifice is closed by a number of long purple bristles, which converge over the centre, and form a sort of natural *chevaux-de-frise*, which will prevent the ingress of insects. It is a native of the mountains of India called Nilgherry, and introduced into this country in 1826, by Dr. Wallich. It is usually kept in the stove, where it flowers from May to October. It is, however, nearly hardy, thrives in the open border in summer, and protection in the greenhouse in-winter. In-

creased readily by cuttings. *Ceropegia*, from *keropegion*, a candlestick, in allusion to the resemblance borne by the corollas of some species to the branch of an antique candelabra.

2. *Echinocactus Eyriesii*, Sweet-scented Spiny Cactus. Icosandria, Monogynia. Cactææ. This species was presented to the Horticultural Society some years since by Sir JOHN LUBBOCK, who had procured it from Mexico, where the genus seems to exist in great numbers; it flowers at various seasons. The flowers are about six inches long; the rays are of the softest white, while the disk is of a rich yellow. They are remarkable for the rich, delicious odour they exhale at night. *Echinocactus*, from the form of the marine animals called *Echini*, which has naturally suggested the application of their name to plants which so much resemble them.

3. *Catasetum semiapertum*, Half-open Catasetum. Gynandria, Monandria. Orchideæ. First introduced by Mr. BELL EDWARD LLOYD, who sent it from Brazil to Miss FALKNER of Fairfield, about eight or nine years ago. More recently it has been sent to Mr. HARRISON of Liverpool, by Dr. DUNDAS, an eminent medical gentleman residing at Bahia. It is not so showy as *C. tridentatum*, but it is peculiarly fragrant, a quality of which all the other known species are destitute. The flowers are of a yellowish green. The plant thrives with the usual treatment, but does best if its roots are actually allowed to immerse themselves in water.

4. *Leptosiphon androsaceus*, Androsace-like Leptosiphon. Pentandria, Monogynia. Polemoniaceæ. This is a bushy annual, growing to the height of eight or ten inches. The flowers are collected into terminal heads, surrounded at their base by a number of floral leaves. The long slender tube of the corolla projects beyond these leaves, and bears at the top five spreading oval divisions, varying in colour from white to pale blue and pink. The multitude of these flowers gives the plant a very gay appearance; and as it is perfectly hardy, and promises to seed well, there is no doubt but that, in a short time, it will be found an important addition to our flower beds. It cannot bear our summer heat, and only flourishes in the spring, or more particularly the autumn, when the sun has lost his power, and the nights are cool with heavy dews. It should, therefore, either be sown in the autumn, so as to flower early, or in June, in order that it may be ready for blossoming in September. Any kind of soil seems to suit it, but it is not improbable that a shaded American border may be best. It is a native of California, whence it was sent by Mr. DOUGLAS.

5. *Calceolaria polifolia*, White-leaved Slipperwort. Diandria, Monogynia. Scrophularineæ. This is apparently a very common plant in the passes in the mountains between Valparaiso and St. Jago, for almost every collection from that locality contains it. It is a hardy perennial, about a foot high, with a woody stem which would probably become shrubby in favourable situations. Its little hoary leaves, and very numerous pale primrose-coloured flowers, have quite a peculiar appearance, and render it extremely different from all the other species. It thrives with the same treatment as other *Calceolarias*, but is impatient of damp in winter; cuttings readily multiply it.

6. *Solanum etuberosum*, Tuberless Solanum. Pentandria, Monogynia. Solanææ. This curious plant is a hardy perennial, a native of Chili, whence it was obtained some years since by the Horticultural Society. It bears its rich clusters of deep purple blossoms, with a golden yellow centre, from July to October, and is very easily multiplied by dividing its stout rooting underground stems. Although extremely similar to the Potatoe in appearance, yet its larger and more compact flowers, and its want of the power of producing tubers, render it a proper plant for a flower-garden.

7. *Nemophila insignis*, Shewy Nemophila. Pentandria, Monogynia. Hydrophyllææ. This elegant species of *Nemophila* is a hardy annual, requiring a rich soil, not damp, and a situation fully exposed to the sun; it must be protected carefully from wet when forming seeds, or they will not ripen; indeed it produced its seeds in the garden very sparingly, with all the care that could be given to it. It is readily distinguished from all other species by the size of the flowers, which are larger even than those of *N. phacelioides*, and of a beautiful light blue colour.

Sweet's British Flower Garden. Edited by DAVID DON, Esq.,
Librarian to the Linnæan Society. Coloured, 3s. ; plain, 2s. 3d.

1. *Lupinus nanus*, Dwarf Lupine. Diadelphia, Decandria. Leguminosæ. This pretty little Lupine was gathered in California by Mr. DOUGLAS, and by him introduced to the garden of the Horticultural Society. Seeds have been distributed to various places. It is to be obtained of most nurserymen and seedsmen. The plant is a hardy annual, and grows about nine inches high. The flowers are in distant whorls, of about five together, and altogether form a spike about five inches long. The corolla is a fine sky-blue, with white and purple intermixed. It is a very handsome species, and would make a fine show if sown in masses, or a bed of it. The plant seeds very freely, and blooms from June to September. *Lupinus*, from *lupus*, a wolf; in allusion to the exhausting habit of the plant.

2. *Rhododendron ferrugineum*, var. *album*, White-flowered Rusty-leaved Rosebay. Decandria, Monogynia. Ericaceæ. Synonyms, *Azalea maculis ferrugineus*, *Ledum alpinum*, *Euonymus Theophrastii*, *Chamaerhodendros montana*, var. *alba*. A very dwarf shrub, scarcely more than a foot high. The flowers are pure white. The plant has probably been originally obtained from the Pyrenees, where it is frequent. It is cultivated in the excellent collection of plants of Mrs. MARRYAT, Wimbledon. It blooms from June to the end of August. *Rhododendron*, from *rhodo*, rose, and *dendron*, a tree.

3. *Pentstemon speciosus*, Showy Pentstemon. Didynamia, Angiospermia. Cheloneæ. This is by far the most beautiful of this showy genus. It was discovered by Mr. DOUGLAS on the banks of Spoken River, in North-west America, and introduced by him to the garden of the Horticultural Society, in 1827. The plant is still rare in collections, from the sparing manner in which it affords slips, and from its seeds being seldom matured, except under favourable circumstances. The flowers are disposed in a long, terminal, loose, racemose panicle, with the branches in distant pairs, and bearing from seven to eleven blossoms of a beautiful pale blue colour. It is found to succeed best in a mixture of peat and loam, and continues in flower the greater part of the summer. *Pentstemon* is derived from the Greek *pen*te, five, and *stemon*, stamen; from the presence of the rudiments of a fifth stamen.

4. *Ebenus cretica*, Cretan Ebony. Diadelphia, Decandria. Leguminosæ. This is a very elegant little bushy evergreen shrub, growing from a foot to eighteen inches high. It has much the habit of an *Onobrychis*, and well suited to ornament rockwork, being found to be perfectly hardy. The flowers are of a beautiful rose-colour. It will grow in almost any kind of light earth. It is increased by seeds and cuttings. The plant is abundant on the Spachian mountains, in Candia, and was sent to Prosper Alpinus by a correspondent in that island, as the *Ebenus fruticosa* of Theophrastus, which most probably meant the *Medicago arborea*. The Ebony of commerce is well known to be the wood of *Diospyros Ebenum*.

The Number for September (omitted in our last) contains—

1. *Clematis montana*, Mountain Virgin's Bower. Polyandria, Polygynia. Ranunculaceæ. The species was originally collected by Dr. F. HAMILTON, at Chitlong, in the Valley of Nepal, flowering in April, and it appears to be a pretty general plant on the mountains, at an elevation of from 5,000 to 7,000 feet above the level of the sea. The plant proves to be quite hardy, and seems to flourish as well in the climate of England as on its native mountains. The flowers are very like those of the *Anemone sylvestris* (Wood Anemone). It loves a loamy soil, and is readily multiplied by layers.

2. *Iris Suertii*, SWERT'S Iris. Triandria, Monogynia. Iridææ. A very elegant Iris, long cultivated in the gardens, but of its origin and native country nothing certain is known. It is very nearly related to *I. germanica*, from which it is chiefly distinguished by the smaller size of all its parts, and by the narrow and wavy segments of its perianthium. We have not remarked whether the flowers are fragrant.

3. *Nierembergia aristata*, Bristle-pointed Nierembergia. Pentandria, Mo-

nogynia. Solanæ. A native of sandy plains on the banks of the Parana, where it was discovered by Mr. TWEEDIE; and from seeds transmitted by him to Mr. NEILL, the plant was raised at Canonmills in 1832. In habit it comes very near to *gracilis* and *ficaulis*, but it is essentially distinguished from these, as well as from every other species of this section, by its broad orbicular, not compressed stigma, which is entirely that of the section *Petunia*. The plant thrives best in a mixture of peat and sand, and roots freely at every joint, if the branches are allowed to be on the surface of the earth.

4. *Campanula divergens*, Spreading Bell-flower. Synonyms, *Campanula cernua*, and *C. spathulata*. Pentandria, Monogynia. Campanulacæ. This plant very much resembles *C. medium*, but which it greatly surpasses in beauty. By several botanists it has been regarded as the normal state of that species. It occurs wild in Hungary, Transylvania, the Bannats of Temeswar, and also in Siberia. It was first taken up by WILLDENOW, in his enumeration of the plants cultivated in the Royal Gardens at Berlin, and is principally distinguished from *C. sibirica* by its more branching habit, less wavy leaves, and larger flowers. The plant delights in a light gravelly or chalky soil, and produces its seeds abundantly. It occurs frequently in gardens under the name of *pulcherrima*, but whether it is identical with the plant so called by SCHRANK, we are uncertain.

The Botanic Garden. Edited by Mr. B. MAUND, F.L.S. Price 1s. 6d. large; 1s. small: coloured.

The Number for September (omitted in our last) contains—

1. *Rosa centifolia*, var. *Village Maid*, Variegated Provence Rose. So numerous have the varieties of seedling Roses become, and so mingled are the characters of some of them, that it is difficult to give them a place in connexion with any distinct species. This beautiful variety is very compact in the arrangement of its petals, as well as rich in its general colouring; and cannot fail of becoming a great favourite in the rosary. It has lately been obtained from France by several English nurserymen.

2. *Hyssopus orientalis*, Oriental Hyssop. Didynamia, Gymnospermia. Labiatæ. This is a remarkably free-flowering ornamental little shrub, of neat growth; and is more powerfully aromatic than the *H. officinalis* or common Hyssop of our gardens. It may be propagated by division, from cuttings, or by seeds. If seeds are sown early in spring, the plants will flower in the succeeding autumn. The systematic name, *Hyssopus*, is deduced from the Hebrew *Ezob*, signifying a herb for sacred uses. Some authors have stated, that the original word was compounded from the Greek, to signify "showering on the countenance," in allusion to a custom of that people, who, in their religious ceremonies, used powdered Hyssop to sprinkle on the heads of worshippers: they either believed that it purified those on whom it was showered, or they used it as typical of purification.

3. *Leptostelma maxima*, Great Leptostelma. Syngenesia, Superflua. Compositæ. This bold herbaceous plant, but for its size, bears most of the general characters of the genus *Erigeron*; indeed, the botanical characters also of the two genera are very closely allied to each other. The composite flowers of *Leptostelma*, each composed of such delicate parts, and elevated six or seven feet high, make it a desirable appendage to the herbaceous ground or shrubbery. It may appropriately have a place amongst the tall Phloxes, Delphiniums, Helianthemums, Asters, and others of the tall Compositæ. Notwithstanding it is a native of Mexico; it has borne, uninjured, three successive winters in England; therefore, doubtless, in the severest seasons, it would require but a slight protection. It may be divided at the root, and will grow in any aspect. *Leptostelma*, from the Greek *leptos*, slender, and *stelma*, a crown; in allusion to the slender petals of its ray.

4. *Digitalis hybrida*, Hybrid Foxglove. Didynamia, Angiospermia. Scrophularinæ. The species which we now introduce has been propagated between the *Digitalis ambigua* and *Gloxinia speciosa*, by Mr. ALEXANDER CAMPBELL, Curator of the Manchester Botanical and Horticultural Society's Garden. We cannot give our readers any information so satisfactory as that which Mr. CAMPBELL himself has furnished us. He says—"The close resemblance which the flowers of *Digitalis* bear to those of the *Gloxinia*, suggested the idea that a cross between them was practicable. I selected a shoot of *Digitalis ambigua* for experiment; half a dozen of its flowers were carefully fertilized with the pollen of *Gloxinia speciosa*; the shoot was denuded of the remaining of its flower-buds, and no more attention was bestowed till the capsules were ripe. One half of those impregnated, produced perfect seeds, which were sown immediately when ripe, and placed in a warm frame till they vegetated, after which they went through the usual process of potting, &c." Mr. CAMPBELL further states, that the whole of them flowered in great profusion in the succeeding year, and continued till the frosts set in. How far nature will admit this system of hybridization, becomes a curious and most interesting inquiry. It is evident that the present division of genera forms no bar to the production of mules between them. In the similarity which the flowers of this genus bear to the finger of a glove, has originated the name *Digitalis*, and its application to these plants; the root of the word being the Latin *digitale*.

PART III.

MISCELLANEOUS INTELLIGENCE.

QUERIES.

ON A SUCCESSION OF FLOWERS.—You, or any of your correspondents, would oblige me (and many others whose gardens resemble mine) if you would favour me with the information required below. My garden is small, and consists of little beds cut out in a grass plat in fancy forms, with long narrow borders on the outside under the walls. I much wish to have a good succession of flowers in the lovely spring, the brilliant summer, and the mature autumn; but do not know how to manage it. I appropriate a bed to each sort of flower, preferring that to mixing various kinds. Of these small beds I have about twelve; the outside borders are much shaded by large evergreen shrubs. What are the best flowers for my small beds, commencing with the spring? when should they be planted? when removed, and to what situation? by what succeeded for the summer when removed, &c. and the same for the autumn? and when one set are planted, what is to be attended to in the bringing on of the succeeding flowers? I should mention that I have no greenhouse of any description, but have spare ground to raise the succession, and plant the removed flowers. What is best to be planted in my dry shaded borders? A READER.

Stoneligh, Warwickshire, July, 1834.

ON HYACINTHS, &c.—I shall feel obliged if you will favour a constant reader of your *Floricultural Cabinet* with a list of the best Hyacinths, Carnations, Auriculas, Polyanthuses, Pinks, Tulips, Dahlias, and Geraniums, which have been shown during the past summer. I should also feel obliged if you, or any of your correspondents, would inform me whether they have used any of "Kemp's Prepared or Decomposed Salt" as a manure in the flower-garden, and what has been the result. FLORA.

Bolton, Sept. 11th, 1834.

ON THE AURICULA.—In the number of your work published last April, your correspondent, W. J. P., New North Road, promised to give a treatise on the best method of raising Auriculas, and treating the old plants. I have taken all the subsequent numbers, but am sorry to say the desired information has not yet appeared; and having suffered severe losses, owing to my ignorance on the subject, I intrude myself on your notice, begging you will grant me the favour of your opinion and advice, and thereby much oblige

Haggerstone, July 24th, 1834.

WM. SPORKS.

P.S. An early answer will be esteemed an additional favour; the loss alluded to is the plants rotting off with the surface of the earth.

ON GLADIOLUSES, IRISES, &c.—Will you, or any of your correspondents, inform me, through your valuable Magazine, of the best method of cultivating the finer sorts of Gladioluses, Irises, Frittelarias, Martagons, and Ixias—the time of planting—the best soil—and whether they will thrive in pots?

Islington, Sept. 10th, 1834.

G. ASHLEY.

ON THE GIANT BROMPTON STOCK.—Being a subscriber to the *Floricultural Cabinet*, and not having seen throughout the work the method of raising the Giant Brompton Stock, I should feel obliged if any of your correspondents could, in your next Number, favour me with the method to pursue, in order to have a good bloom; being entirely at a loss to know whether they should be kept in-doors or out during winter, and likewise the soil fit to sow the seed in.

W. B.

Fenchurch street, Sept. 3d, 1834.

ON COMBRETUM PURPUREUM, &c.—I shall take it as a favour if the Conductor, or some correspondent, will inform me of the best mode of blooming the *Combretum purpureum*. The plant I have grows very strong, but never shows any appearance of bloom: it is growing in a stove at present.—I am also desirous of some information on the *Ardisia excelsior*. I have seen less plants than mine loaded with fruit, but mine never has more than one or two flowers or fruit at once. The plant grows very well, and appears in good health.

ARDISIA.

ON EVERGREENS, &c.—Will you oblige me with the names of a dozen different sorts of dwarf evergreens, say from one to three or four feet high, fit to make a small shrubbery at the end of a narrow slip of garden ground in Pimlico, mentioning the proper time to transplant them, and where they are to be got best; also if there are any gardeners that pay exclusive attention to growing evergreens, as there are some that grow Tulips, Pinks, Carnations, Pansies, &c.

HENRY LIDDELL.

P.S. Is there any place in London where those Fuchsias mentioned in Mr. BARRATT's Article, in your August Number, can be procured, for I cannot send to Wakefield for a few shillings' worth of plants?

[NOTE.—All the kinds of Fuchsias may be procured of Messrs. NOBLE & SON, seedsmen, Fleet-street, London. Messrs. LODDIGES have a most extensive collection of evergreen shrubs, and a selection of fine plants might readily be made in their nursery at Hackney. The following are well worth growing, being hardy, varying much in foliage, and of a handsome growth:—*Prinos glaber*, Winter Berry, 2 to 3 ft. high; *Kalmia latifolia*, 2 to 3 ft.; *Ligustrum sinensis*, Broad-leaved Chinese Privet, 4 to 5 ft.; *Phillyreas*, Holly-leaved, 4 to 6 ft.; *Angustifolia*, narrow-leaved, 2 to 3 ft.; Willow-leaved, 3 to 4 ft.; *Rhododendron Catawbiensis*, 3 ft., *ponticum*, do., *maximum*, do., and many other species and varieties; *Arbutus*, Strawberry Tree, 4 ft.; *Cistus Ladaniiferus*, Rock Rose, 3 to 6 ft.; *Daphne laureola*, 3 ft., *pontica*, do.; *Erica stricta*, 2 ft., *vulgaris pleno*, do.; *Double-blossomed Whin*, or *Furze*, 3 to 4 ft.; *Tree Ivy*, 3 to 4 ft.; *Cornus capitata*, 4 ft.; the narrow-leaved dwarf Laurel, 3 ft.; *Lonicera sempervirens*, Evergreen Honeysuckle, 4 ft.; *Acuba japonica*, Gold Plant, 4 ft.; and *Lauristinuses*. Some of the above kinds will, in some situations, grow higher; but they will bear cutting in, so as to form handsome bushes of the heights stated. Common Laurels, and most kinds of Hollies, would also answer as common things, and would bear pruning to any desired size.—COND.]

ON RAISING THE CALCEOLARIA AND MIMULUS FROM SEED, &c.—Could you, or any of your readers, give me a little information on raising the Calceolaria and Mimulus from seed and from cuttings? D. PEARCE.

ON ROSES.—In your June Number, you state that “cuttings of Garden Roses will now strike root under a hand glass.” Is the common Cabbage Rose only meant, or the Tuscany and others which are hardy? C. C. C. C.

[All kinds of Garden Roses are meant. The cuttings should be the present year's shoots, cut off close to the previous year's wood.—COND.]

ON PILLARS OF ROSES, &c. &c.—A contributor to your Magazine would feel thankful for a more particular description of the way to make the “Pillar of Roses” mentioned in No. XV. p. 114. He would also be glad to know if *Thunbergia alata* is to be raised from seed, and if so, when it should be sown, in order to its blooming in the open border in the summer. Also, when the *Schizanthus Hookerii* and *retusers* should be sown, and whether it is right to plant them in the open border. Is it improper to water them daily in the summer? I have found them very apt suddenly to droop and decay, both in the border and in a frame. What is the probable cause? Are they annuals or biennials?—as they are called both in different catalogues. Which is the most probable nursery-ground to obtain the Double White Hepatica—(as it seems there is such a flower, from your last month's correspondence, p. 186)—and the *Pentstemon pruinusum*? The latter I have attempted several times to procure, without success.

August 19th, 1834.

ANSWERS.

REPLY TO QUERIES OF * AND S. C. A. ON HEATHS, &c.—In your No. for July is a query by “*,” dated Bodmin. Since no one has taken up his pen to reply to the request, and as “S. C. A.” begs in your last No. that “*s” query may be answered, I again, but very reluctantly, take up my pen, fearing that some of your Correspondents may wish to throw my communication into a “sea coal fire,” or consider that the “bear’s paw” may scratch up some of the “Iris’s” and “Snowdrops” who flourish so luxuriantly in the pages of the *Cabinet*. However, I have again taken the liberty of forming one of your Correspondents; and if you deem my remarks worthy, I shall be happy from time to time to give any information in my power.—Your Correspondent requests a list of a few of the best kinds of greenhouse Ericas. As we cultivate upwards of 100, I give a list of a few of what I consider the best that can be grown:—

Those marked thus (*) will stand any winter, and are very hardy; but (+) require a mat.

<i>Erica aristata.</i>	* <i>Erica hartnella.</i>	<i>Erica tricolor.</i>
— <i>bicolor.</i>	— <i>Bowiana.</i>	— <i>grandiflora.</i>
— <i>ampullacea.</i>	— <i>monsonia.</i>	— <i>mutabilis.</i>
— <i>mundula.</i>	— <i>ventricosa.</i>	— <i>vernix.</i>
— <i>perspicua.</i>	— <i>sulphurea.</i>	— <i>sordida.</i>

Hardy Ericas I do not cultivate, but send a list of what I fancy are good ones, viz. :—

* <i>Erica actaea.</i>	* <i>Erica floribunda.</i>	* <i>Erica triflora.</i>
— <i>australis.</i>	— <i>carnea.</i>	+ <i>multiflora.</i>
+ <i>umbellata.</i>	— <i>vagans.</i>	— <i>vulgaris.</i>
— <i>colluna.</i>	— <i>stricta.</i>	— <i>tetralix.</i>

He wishes for a collection of hardy greenhouse plants. If he wishes his place to look gay, I would advise him to have a few Camellias, which will flower in spring with his Ericas and Hyacinths, and would look very well during the spring. When the Camellias and Ericas go out of doors to their summer quarters, Calceolarias, Balsams, Cockscombs, *Schizanthus* of sorts, with *Epacris grandiflora*, and *Pimelea decussata*, *Pimelea rosea*, *Pelargoniums* of sorts, &c. &c. will furnish him with a list of plants that will make his place look beautiful. I would advise him to exclude Vines, and substitute

that king of creepers, the *Glycine*, which will amply repay him for any trouble he may be at in its cultivation; I would plant it out of doors in good soil, and bring it through the wall into the greenhouse. I think I have now answered "s" query. I cannot in my present letter give "S. C. A." a list of the best kinds of greenhouse plants for him to cultivate; he does not state how large his greenhouse is—perhaps Mr. HARRISON could not find room for a long list! The best work on the cultivation of Stove and Greenhouse plants, *Ericas*, &c. &c. is FORBES's "*Hortus Woburnensis*." I forgot to answer "s" query as to whether an high or low greenhouse is the best for plants. I should say a low one—particularly as he wishes to cultivate *Ericas*, which should be placed near the "glass, and have plenty of air and water," vide FORBES's "*Hortus Woburnensis*," or the extract Mr. HARRISON made from it. I must now thank you for the space you have given me in the pages of your *Cabinet*; and again add, that I shall be happy at any time to give any information I may be possessed of.

August 6th, 1834.

J. C. H.

ON CARNATIONS.—In answer to C. W. J., I beg to inform him that he quite mistook the disease in his Carnations, and, by so doing, hastened their death. His plants died either from the bark having been wounded in pulling off the decayed leaves, or from their having been taken from unsound plants, or his having neglected to shorten that part which connected the layer with the old plant to a level with the nib from which it had made root. If this were not cut off, it decayed; and retaining a large quantity of moisture, caused the disease to spread upwards, till it reached the pith, where the decay became general, and the loss of his plants was the consequence. For this disease, when once established, I know of no cure or remedy, as it does not show itself till after the plant is dead. It therefore becomes us to guard against the causes, such as I have before enumerated: besides these, there is another trick which florists resort to, to cause this disease, viz., running a red-hot needle up their centre; but as C. W. J. bought his of respectable florists, I should say nothing of the sort had been done. I would not, for the sake of saving a few shillings, be induced to save layers from a plant in an unsound state, as in nine cases out of ten they inherit the disease, and repay us for ten months' care by suddenly baulking our expectations. Many florists top-dress their plants in June; others water them with a solution of nitre:—to all such practices I am decidedly opposed, for if proper compost were used at the outset, they would require nothing of the sort; and they only produce disease. I am sorry I can give C. W. J. no hopes that he will ever find a remedy; and next year will be still more fatal than this, as I have this season seen few collections where disease did not prevail to a great extent.

INNOVATOR.

Sept. 3d, 1834.

ON FLOWERING HELIOTROPES.—In the spring take the plants to the potting shed; turn them out of the pots; reduce the old ball, cutting off all dead roots; repot them into pots suitable to the size of the plant, in good loam and leaf mould; give them a little water to settle the soil; spur in all lateral shoots; put them into a stove heat or dung-bed heat; give them air occasionally; and when growing freely, supply them with plenty of water; and in the summer months they should stand in water, when they will flower in abundance to the satisfaction of your Correspondent, MYRTLE.

Great Bookham, Surrey, July 2d, 1834.

J. W. D.

REFERENCE TO PLATE.

1. *Duke of St. Alban's Pink*. This flower has, as will be seen by the drawing, several distinguishing properties. We understand there are several varieties on sale under this name; therefore, purchasers must be on their guard in order to obtain the true variety, of which our drawing gives a correct representation.

2. *Delphinium chinensis*, var. *albiflora*, Double White-flowering Chinese Larkspur. This very handsome *Delphinium* is a hybrid, raised by Mr. SHILLING, nurseryman, Northwimbrough, near Odiham, Hampshire.

from seed collected from *D. chinensis*, blue-flowered, impregnated by some other kind not named to us. It is certainly a valuable acquisition, and well deserves a situation in every flower-garden. The flowers are of a delicate lively white, and, judging from the specimen sent us, will make a very gay and pleasing appearance, and be a striking contrast to the splendid blue of *D. chinensis*.

3. *Gilia tricolor*, Three-coloured Gilia. Scarcely any thing can be prettier than this plant, when thickly filling a bed a few feet in breadth and length. It is quite hardy, and grows about a foot high, with an erect stem, and foliage much resembling the well-known *G. capitata*; but the flowers are much longer, and instead of being collected in globose heads, are widely spread at the head of long peduncles, which, being very numerous, form a large and rather dense panicle, and thus show off to great advantage. It flowers from July to September, and will grow in any kind of soil. It may be procured of Messrs. WARNER & Co., and other London seedsmen.

4. *Tropaeolum majus*, var. *Shillingii*, SHILLING'S Hybrid Nasturtium. This very singular and pretty variety of Nasturtium (Indian Cress) is a hybrid, raised from seed collected from *T. atrosanguineum*, dark blood-coloured. The plant, in its habit, resembles its female parent, but the flowers are larger, and very brilliant and showy. The corolla is quite flat at the surface, exhibiting the whole of it much more than *T. atrosanguineum*; the petals are very round and neat; the spots at the centre are very dark, and form a pleasing contrast to the other colour of the petals. The specimens sent us were destitute of the hairy fringe which is seen in the old kind of Indian Cress, as well as in *T. atrosanguineum*.

FLORICULTURAL CALENDAR FOR NOVEMBER.

GREEN-HOUSE PLANTS.—If any are not yet housed, they should now be without delay. All possible air should be admitted to the green-house, excepting when frosty. The plants should not be watered in the "broad cast" manner, as it is termed; but should be attended to *singly*, so that no plant may be watered but what is actually dry. Water should not be given in the evening, but in the early part of the day, so that damps may be dried up before the house is closed. If watered in the evening, the damp arising during the night will cause the leaves to decay, and encourage moss, lichens, &c. upon the soil. This will invariably be the consequence, unless fire heat be applied to counteract the effect. The soil in the pots should frequently be loosened at the surface, to prevent its forming a mossy or very compact state.

FLOWER GARDEN.—All decayed stalks should be cleared away. Seeds of all kinds of flowering plants should be collected, if neglected hitherto. The borders should be dug over, and additional fresh soil be added where required. All kinds of perennial border flowers should be planted. If any plant has become too large, it should now be reduced in size, and vacancies filled up. Bulbous roots, Ranunculuses, Anemones, &c., should be planted without delay. For Auriculas, Carnations, &c., see last month's Calendar, where suitable directions are given. Evergreen and deciduous shrubs may be planted this month. Protect beds of bulbous flowering plants in unfavourable weather. Newly-planted shrubs, in exposed situations, should be secured to stakes. All kinds of border flowers kept in pots for winter protection, &c., should be removed to winter quarters, either in pots, frames, or some warm, dry situation. Composts for floricultural purposes should be turned, &c. Calceolarias that have been in borders should be taken up, and kept in pots, in a cool, dry situation, either in the green-house, frame, or pit. Let the plants of Chrysanthemums in-doors have abundance of air. In taking up Dahlia roots, be careful not to twist or injure the tubers near to the crown: this attention is particularly necessary with small roots. Care should be taken to have the names or numbers well secured to the *root* by means of copper-wire fastenings: it often happens that the *stalk* perishes before spring, and names attached thereto are liable to be removed, and to cause confusion. Tubers of Commellina, and bulbs of Tigridias, should be taken up and preserved dry through winter.

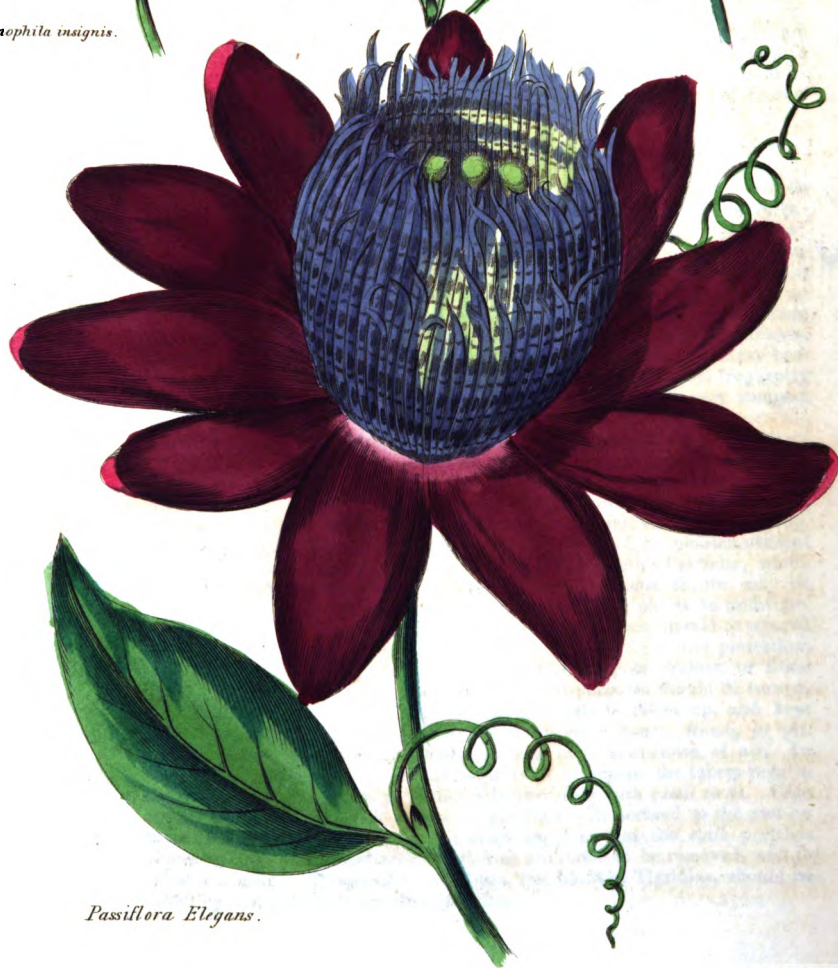




Nemophila insignis.



Leptotesiphon androsaceus.



Passiflora Elegans.

J & J. Parkin Sc.

THE
FLORICULTURAL CABINET,

DECEMBER 1st, 1834.

PART I.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*On the Cultivation of Ten-week Stocks.*
By A. E.

Having cultivated, for my own amusement, with great success, for several years past, the Ten-week Stock, (*i. e.* the scarlet, the purple, and the white,) I am induced to inform you of the method I pursue, in order to have a fine bloom of them in the spring. The last week in October, I remove the frame from a cucumber bed, situated in a full south aspect, raking all the old mould from the surface, until I come to the old dung. I then replace the frame, and spread on the top of the dung about three inches thick of good loamy soil, raking it even, on which I sow the seed pretty thick (of course keeping each colour separate by a mark). I give it a good sprinkling of water, and shut the lights down close until the plants appear ; after which, I open the frame every day through the winter, except in wet or frosty weather ; but from the time of sowing until the middle of March, I never let them have a drop of water ; in that particular depends their flourishing through the winter, for if they once get wet, they are sure to shank off. By exposing them to the cold, I make them hardy, so that I can plant them in the middle of March, which I always prefer doing when the weather is dry ; and though at that season the wind is generally harsh and frosty, I do not find it affect the plants. By planting in dry weather, the plants get hold of the earth before the worms can drag them out. I prefer planting each sort in a bed

by themselves, as I fancy they make a much finer show than when planted about the borders.

A. E.

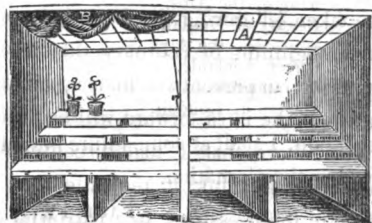
Hoxton, Sept. 3rd, 1834.

ARTICLE II.—*On the Culture and Management of the Auricula.* By PAUL PRY.

I here send you my method of cultivating the Auricula, which I have practised with the greatest success for several years. The following is the compost which I use to pot them in :—two barrowfuls of cow-dung, one year old ; one ditto of sheep-dung, one year old ; one ditto of maiden loam ; half ditto of black leaf-mould ; and one peck of river sand. I have discontinued the use of hot manures, (such as blood, night-soil, pigeons' dung, &c.) as I have more than once proved their "*ill effects.*" Many young florists, from a wish to outrival the elder ones, have used this trash to such an extent as to kill their plants altogether. When the plants are potted, set them in a shady place till they have taken root, at which time be careful to protect them from heavy rains. Towards the latter end of September, they should be placed in a frame upon bricks or tiles, in a full south aspect ; raise the frame by placing a brick at each corner, to admit a free current of air to pass between them, in which situation they may remain till frosty weather commences. However cold the weather may be, provided it is fine, the lights should be taken off during the day, and put on again at night. Towards the beginning of February, they must be carefully covered up every night, to prevent the buds receiving any check, as by this time some of the most forward will begin to show bloom. Although I stated above that I had discontinued the use of hot manures, I nevertheless think it requisite that a *small* portion should be used in top-dressing : to a barrowful of the above compost, add not more than a peck of goose-dung, at least two years and a half old. With this dress the plants about the beginning of February ; remove the old soil clean away down to the fibres, and replace it with the new ; give to each a good watering with pure water. Should any gentle rains fall during the months of February or March, you may expose them for an hour or two, once or twice in the course of each month ; keep them closely covered up with mats every night, for one night's frost

would do them a great deal of injury ; remove the mats early every morning, and raise the lights, to admit a small portion of air ; should the weather prove fine, push the lights completely off. Towards the latter end of March, the trusses will begin to rise, when those buds that are small, and the over-crowded ones, should be thinned out, leaving from five to ten pips upon each stem. The period from the opening of the pips to full bloom I consider the most critical—that is, from the end of March to the end of April ; during which time the lights must be kept over the plants night and day, raising them a little behind to admit air. Should the sun shine hot, as it frequently does towards the end of April, it is advisable to throw a thin mat over the lights about ten o'clock, and remove it again about four. Be careful to supply them regularly with water ; for should they at any time be allowed to flag, it will give them a serious check. When the pips begin to expand, they should be removed to an eastern aspect, and covered with hand-glasses ; under a low fence or ridge is the most suitable place, where they can receive about two hours of the morning sun. The glasses must be raised a few inches to admit air, but they should be shut down close at night, and covered with a stout mat or two. When the pips are all expanded, the plants may be removed to the stage, which should face the north : as to the construction, growers differ greatly, but I think the most simple method is

Fig. 1.



as here represented (*fig. 1.*)

The lights A being taken off, this forms a very good summer situation. Curtains should be hung on, as shewn at B, to let down in case of frost or driving rain. Small rings should be fastened on the

bottom of the curtains, to catch to nails or hooks placed in the lowest shelf, and thereby prevent their being waisted to and fro, and coming in contact with the plants. When placed upon the stage, care must be taken to supply the plants with water, when their colours will become more brilliant, and, with their beautiful tints and sweet odour, amply repay the careful florist. As soon as the pips begin to fade, remove them from the stage (for they frequently receive great injury from being kept under cover too long), and

set them upon bricks or tiles in a cool shady place not under the drips of trees. In warm weather, care must be taken to supply them with water at least three times a week ; be careful not to let water touch the leaves in dry hot weather ; to obviate this as much

Fig. 2.



as possible I use a water-pot with the spout turned down (*see fig. 2.*) Treat them in this manner till the time of potting, which for strong old plants signifies little ; be careful always to place a good handful of potsherds or stones at the bottom of each pot, to drain off the superabundant moisture. Should much rain fall during August and September, it is advisable to erect a slight covering over the plants, for I have found that continued rains cause them to rot and decay.

For the guidance of those who are about to commence the culture of the Auricula, I subjoin a list of some of the most favourite kinds at present cultivated :—

GREEN EDGED.

Lee's Colonel Taylor.
Booth's Freedom.
Howard's Nelson.
Stretch's Alexander.
Barlow's King.
Pollitt's Ruler.
—— Standard.

GREY EDGED.

Grimes' Privateer.
Kenyon's Ringleader.
Waterhouse's Conqueror of Europe.
Thompson's Revenge.
Ashford's Rule-All.
Rider's Waterloo.

WHITE EDGED.

Taylor's Favourite.
—— Glory.

Crompton's Admiral Gardiner.

Lee's Bright Venus.
Wood's Delight.
Pillar of Beauty.

SELFS.

Redman's Metropolitan.
Scholes's Ned Ludd.
True Blue.
Netherwood's Othello.
Bury's Lord Primate.
Mellor's Lord Howe.

ALPINES.

King of the Alps.
Beauty of England.
—— the Alps.
Queen Adelaide.
Ultramarine.
Bishop of London.

Should this meet your approbation, I shall at some future period send you my method of cultivating the Carnation.

PAUL PRY.

ARTICLE III.—*A few Observations on Soils and Manures.* By Mr. F. F. ASHFORD.

Considering that a few observations on soils and manures will be acceptable to many of your readers, I am induced to send the following for insertion in the pages of the *Floricultural Cabinet*, if thought worthy of admittance.

Loams, peats, dungs, vegetable decayed substances, and sands, are the principal kinds used in floriculture ; but various are the different mixtures and composts that may be obtained from them by admixtures, or adding one kind to another.

1. *Loams* are of various kinds, and go by different names, as stiff loam, sandy loam, yellow hazel loam, loam of a soapy texture, &c. These differences are caused by the loam being got out of different pastures, and sometimes from being got from different depths. Yellow hazel loam is the kind that I should recommend for floricultural purposes, owing to the openness of its nature, and the rich mellow qualities it possesses. It should be obtained from some neighbouring pasturage that has not been broken up for some years. As Mr. PRICE has given, in page 185 of Vol. I., some excellent remarks concerning the nature of soils, I thought it would be unnecessary for me to notice that subject.

2. *Peat* is in the same respect as loam in having different names according to its kinds, which are, peat, sandy peat, and bog earth. Peat is that collected from commons of a fine loose nature, but destitute of silvery sand. Sandy peat is that collected from where the *Erica vulgaris* grows spontaneously, and which is plentifully supplied with the above sand : it is most congenial to the growth of tender exotics, with fine fibrous roots, as *Ericas*, *Epacris*, *Phenocoma*, &c. Bog earth is that obtained either from below the others, or from some moss or uncultivated place ; it may be distinguished from the above by the blackness of its colour, and the closeness of its nature ; it is sometimes found saturated with water : this kind, after being duly prepared, answers very well for what are commonly called bog plants, such as *Rhododendrons*, *Azaleas*, *Kalmias*, *Andromedas*, &c.

3. *Dungs and manures* are also of various kinds, as those produced from horses, cows, pigs, and fowls, and each has a different nature—as, for instance, dung from cows being the coldest, from pigs the hottest, and from fowls the richest ; but I should recommend to horticulturists well decomposed hot-bed dung, made from the produce of the horse-stable, and at least two years old, which, in my opinion, will prove the best, as this kind of manure embraces none of the above extremes.

4. *Vegetable decayed substances* are also various, as leaf mould, rotten willow wood, wood ashes, and also the refuse of the vegetable or kitchen garden.

5. *Sands* are either found in beds, or on the sides of rivers ; but the best kind for florists is what is generally termed drift sand, or sand washed by heavy showers into ridges.

Having thus noticed the primary kinds of soils, &c. used in floriculture, it remains for me to state the preparations necessary before they can be used. The proper time for collecting the different kinds of soils and vegetable manures is unquestionably in autumn, after the beneficial rains and solar influence of the preceding summer, and that they may receive the requisite ameliorating quality of the forthcoming winter. In getting the various kinds required, care should be taken not to dig more than nine or, at the furthest depth, twelve inches below the surface, as the soil, laying lower, is more concealed from the sun and atmosphere, and consequently not near so good. Let them be carted in fine, fair weather, and thrown up in the compost ground in different heaps, placing the greensward of the loams on the top, with the roots uppermost, that they may the sooner decay. Thus let them remain till winter, when they should be at different times turned over, well chopping and mixing the sward with the soil. The dungs, decayed vegetables, fallen leaves, and rotten wood, may be treated in a similar manner.

It is a customary manner amongst old cultivators to sift their composts before using. This is, in a great measure, the cause of exotics not succeeding, and appearing in health and vigour : for, by the process of screening, all the stringy and fibrous rooty part of the mould is lost, which is certainly the best part of it, as by its means the compost is kept open and free for the young roots to run in, and, without this part, the particles of the soil get close together, and often bake as hard as a brick. Those persons that have practised this method think it impossible to improve, but one moment's reasoning with themselves will convince them they are in error. Manures, &c. must of course be coarsely screened, that the stones, pieces of wood, &c. may be extracted ; but this operation must only be performed when the said kinds are wanted.

If this communication be thought worthy of the *Floricultural Cabinet*, it shall be seconded by another on the different kinds of compost that may be obtained by mixtures of the above.

F. F. ASHFORD.

Colston Hall, August 27th, 1834.

ARTICLE IV.—*Gleanings from Old Authors.* By
SNOWDROP.

OF WATERING PLANTS.

“ Now for the watering plants and flowers observe with me.

“ If you fear dry weather, do not defer too long before you water, but do it gently before the earth is too dry, consideration had to the depth of your roots and those that are deepest water most ; and when you begin to water continue it as long as you find occasion.

“ Use not Well water, for tender plants, for it is so strained thro’ the earth or rather barren sands or rocks, and for want of the sun so chill and cold, that having no nourishment, rather the contrary, doth more hurt than good ; Rivers that run quick and long on sharp gravel are little better, but if you are forced to use such, let it stand sometime in tubs in the sun mixed with dung.

“ Let the quantity and quality of the dung mixed with the water, be according to the nature of your plants ; if your plants be great growers and require heat, then put horse dung in your water : If your water be bad, then put dung in to help it ; Let it stand in the sun and open air uncovered : If your plants be fine and tender, then put Sheep or Cowes dung, Deer or Asses dung into the water ; the worse the ground and more barren be sure to put in the more dung. Take care you water no plants with standing stinking ditch water, nor no water that stinketh ; for sweet water, (not too clear) and fresh mould (not musty or tainted by stinking weeds) is as proper for tender plants as sweet and good food, warm and clean lodging, for tender and fine bred persons.

“ Rain water is very good if not too long kept, but if your Vessel be large, the oftener you stir it the longer it will keep sweet.

“ Large and Navigable rivers, that receive much soil by washing streets and the many sinks that run into it, and which by its own motion doth cleanse itself from that which is noxious, both to man and plants, is an excellent water for all sorts of plants.

“ The larger the ponds be, the better the water is for plants, the opener to the Sun the better, the more motion they have, by Horses washing in them, or Geese and Ducks swimming, ’tis so much the better.

“ Water all seeds with the smallest or rain like drops you can, and not too much at a time or too fiercely, lest you discover them.

“ For flowers and plants whose leaves lie on the ground, water them at some distance, by making a hollow circle about the plant and pouring water into it, by which means you avoid annoying the leaves by discolouring water, or chilling the roots by too sudden coldness.

“ Use not any liquors, for watering either naturally hot as spirits, or artificially made so by heating over the fire.

“ In Summer time or all warm seasons, the evening is best for watering, because the water will have time to sink into the earth, and the plant attract it, before the Sun's heat exhales it ; But in Winter or cold weather the morning is the most proper time, that the superfluous moisture may be evaporated ere the cold night overtake you, and chill perhaps kill a tender plant.

“ A Plant that delights in moisture, or a drooping plant that you think water will preserve may be watered by filtration, *i. e.* set an earthen or wooden vessel on a brick full of water near your plant, that all the water may be higher than the earth ; wet a thick woollen list, put one end with a stone or bit of lead to it into the water, that it may keep to the bottom ; lay the other end on the ground near the root of the plant, and the water will distil out of the bowl or pot through the list, because that part of it out of the pot of water, hangs lower than that within, &c.

“ All sorts of fibrous roots are assured in their growth by convenient watering ; but for bulbous and tuberous roots, the Gardiner's hand ought to be more sparing.”

SAMUEL GILBERT, *Phileremus*.

In the above extract no mention is made of watering over the foliage. To newly removed plants it certainly is most beneficial, and very much promotes their growth. In smoky neighbourhoods, watering or syringing over the leaves, in dry weather, cleanses them from soot, and dust, and enables them to perform their proper functions with vigour. It must, however, be carefully borne in mind that the *top* watering can only be safely performed when the sun has left the plants in the shade. The only plants that I am aware of that form an exception to this rule are the Chinese Chrysanthemums, the foliage of which is very much be-

nefitted by being watered in the blazing sun. In dry weather I always remove plants in the evening, and water them well overhead, and which I continue to do, at the same period, as long as appears necessary.

SNOWDROP.

ARTICLE V.—*On the Culture of Heliotropes.* By Mr. HENRY LADDS.

Observing that one of your correspondents requests information on the cultivation of those fragrant plants, the Heliotropes,—and having cultivated them very successfully *in pots*, so as to have them in bloom from March to December,—I herewith send you my mode of treatment, for insertion in the *Cabinet*.

About the middle of June, the old plants are in vigorous growth, and beginning to bloom. If there are more branches than what I think are necessary, I cut all out excepting five or six on each plant. If I find I have not sufficient for my supply of cuttings, I *now* cut down some of the old plants to within three inches of the bottom. After dressing off the leaves at the lower part of the cuttings, (which are about four inches from the end of each shoot,) I insert them in sand and loam, placing them close to the side of the pot, and put them into a frame, where a slight heat is kept, shading them from sun. By the beginning of August, the cuttings are well rooted. I then pot them into sixties, using a rich soil, and well draining the pots. By the end of August, the plants begin to shew bloom; as soon as that appears, I cut off the tops, leaving each about $2\frac{1}{2}$ inches long. The old plants which I raised last year, will, by the end of August, be nearly exhausted of flowers; from these I take off a good supply of cuttings, and, with those I cut from the young plants in heading down, I provide my next and last supply for the year. These I insert into seed-pans, as close as I can, to strike; placing them in a strong heat, so as to get them *well rooted* before cold weather sets in. I let them stand in these pans through the winter, being a saving of room.

By the middle of August, those plants I cut down in June will be in bloom. After flowering, I cut the whole of them down to within a few inches of the bottom: by this means young shoots are uniformly produced near the roots, which make the plants appear full, and not so unsightly as when they have long naked

stems. After heading down, I place the plants in cool frames, where I keep a small supply of tan, for the winter. In this situation the plants generally lose most of their leaves, but they retain life.

About the first week in May, or even earlier, I pot the plants I struck last June, and which have been kept in 60's, into 32-sized pots; and the cuttings I struck in August, into 60's, and when grown sufficiently, into 32's.

The compost in which I grow the *Heliotrope* consists of one-half well-rotted dung, one-fourth loam, and the remainder river sand and vegetable mould.

I keep no old plants that are more than three years old at the utmost, the stems after that becoming ragged and unsightly, nor do they bloom as well as young plants; but I keep all my plants young, and therefore they are vigorous and handsome. The old plants that I no longer want for pots, I turn out into the open border, where their delightful fragrance amply compensates for any situation they occupy. They bloom more vigorously in the open border than when in pots, but in the latter they furnish a supply of bloom for a room, green-house, or conservatory, and they will far more than repay for any trouble bestowed upon them with a continued bloom from March till December. At the latter end of the year, as well as for spring blooming, the moderate heat of a stove will be required.

During November and December, when *Chrysanthemums* are in blossom, and intermixed with *Heliotropes*, young plants of *Fuchsia microphylla*, *Alonsoas*, white and purple kinds of Chinese *Primroses*, &c., they produce a splendid lively appearance, turning this dull season of the year into the gaiety of spring or summer.

Walworth.

HENRY LADDS.

N.B. If room can be spared in a hot-house for the last supply of cuttings to strike in, I find them do well there, if shaded for a day or two at first.

ARTICLE VI.—*On the Raising of the Chelone barbata from Seed.* By A. E.

Having been a subscriber to the *Floricultural Cabinet* from its commencement, and having therefrom derived much valuable in-

formation, I feel great pleasure in contributing my mite of experience, and hope it may prove interesting to some portion of your numerous readers.

In the autumn of last year, about November, I cut off the principal seed-stem of my *Chelone barbata*, and in paper carefully and gradually dried it, at a moderate distance from the fire. In February 1834, I sowed the seed thus obtained, in soil composed of equal portions of sand, leaf-mould, maiden loam, and rotten manure; covering this small seed, which to some would appear as dust, very slightly, and placing it in the parlour, having no greenhouse. In May the seedlings were placed out in the open border, and two of them are now (Sept. 9th) in full bloom.

I have seen no description of this beautiful plant, except in a work entitled *Flora Conspicua*, in which it is stated that this plant can only be increased by parting the root, or by cuttings. My parent plant blowed so profusely as to prevent the possibility of the former plan, viz. dividing the root; and though I tried the latter one with three cuttings, it completely failed. From the success of my first experiment, I am induced to believe that the seed of many valuable plants may be perfected in our climate.

As I think the work before alluded to is discontinued, I shall, for the benefit of your readers, copy the author's remarks on this beautiful plant.

"CHELONE BARBATA.

"DIDYNAMIA.

ANGIOSPERMIA.

"Class 14.

Order 2.

"The delicacy and grace of this herbaceous plant will ever be found sufficient to induce the lovers of flowers to give it a conspicuous place in the herbaceous border. The singular formation and pendant position of its little tubular flowers—the handsome pyramidical form produced by each stalk—and the height to which the centre stalk of the established plant will rise, (often six feet,) surrounded by other stalks of weaker and shorter growth, producing a succession of blooms for nearly two months,—render this plant truly interesting.

"It thrives well in common garden mould, but will grow luxuriantly with a portion of loam. As it does not perfect its seeds in this country, it must be increased by dividing the root, or by cut-

tings; which latter method will answer very well, by taking the young shoots, and placing the cuttings under a hand-glass.

"It is a native of Chili, and was introduced in 1793."

Corndean, near Cheltenham, Sept. 9th, 1834.

A. E.

ARTICLE VII.—*Remarks on the Colours and Properties of One Thousand Species and Varieties of Roses.*
By ST. PATRICK.

(CONCLUDED FROM PAGE 255.)

CREEPING AND RUNNING ROSES—(CONTINUED.)

NAMES.	DESCRIPTION.
788 Princess Louise	Fine white.
789 — Marie	Beautiful white.
790 Purple Boursault	Semi-double purple.
791 Queen of the Belgians	Delicate white semi-double.
792 Rose Clare	Single bright red.
793 Sempervirens	Single white.
794 — pleno	Double white.
795 — rosea	Double rose.
796 Seneca	Single delicate white.
797 True Crimson Boursault	Beautiful crimson.
798 Watts' Climbing Provence	Fine rose.
799 Zephyr	Fine rosy blush.

NOISETTE ROSES.

800 Aline Chatelain	Fine white.
801 Amenia	Large rosy blush.
802 Amerique Blanche	Semi-double white.
803 Amie Vibert	Fine large white.
804 Belle de Woodlands	Fine pink.
805 — Brulor	Fine pale blush.
806 Bouganville	Pretty light purple.
807 Boule de neige	Beautiful pure white globe.
808 Boquet tout fait	White and yellow eye.
809 Cadot	Large deep lilac.
810 Camellia pourpre	Fine rosy purple.
811 Caroline	Pretty small pink.
812 Cerise	Beautiful purple.
813 Chamagana	Pale blush.
814 Charles the Tenth	Very double fine red.
815 Charlotte Calper	Bright pink.
816 Comtesse Odoissec	Very pretty rosy blush.
817 Conque de Venus	Large blush white.
818 Countess d'Orleans	Fine large blush.
819 Cramoise	Very double small red.
820 Delaage	Small compact white.
821 Demetrieuse	Light crimson.
822 Duc de Boufflers	Small sulphur.
823 — Broglie	Pale rosy blush.
824 Felicite	Fine blush.
825 Grandiflora	Very large blush.
826 Isabelle d'Orleans	Fine globe white.
827 Jacques	Fine small red.
828 La Cherie	Fine large rose.
829 — Fayette	Deep purple.
830 — Jolie	Small rose.

NAMES.	DESCRIPTION.
831 Lamarque	Very large pale sulphur-colour.
832 La Neige	Small delicate white.
833 — Nymphe	Small rose.
834 — Petite Angevinne	Small cream-colour.
835 Lee	Very beautiful large blush.
836 Madame d'Arblay	Fine rosy blush.
837 ——— Laffay	Beautiful rosy purple.
838 Mademoiselle d'Eufraſie	Very splendid cream-colour.
839 ——— Felicia	Cream-colour.
840 Marianne	Very double lilac.
841 Mignon	Small globe white.
842 Milarie de Montgoie	Bright red.
843 Milton	Bright blush.
844 Nana	Small lilac purple.
845 Nankin	Small buff.
846 New French Yellow	Fine deep yellow, tinged with red.
847 Old Blush	Very light blush.
848 Ordinaire	Pink.
849 Pink, Wells's	Fine bright pink.
850 Pourpre Fonce	Small purple.
851 Pulchella	Small rosy purple.
852 Purple, Wells's	Beautiful purple.
853 Red	Large fine pink.
854 Renoncule	Very fine pale blush.
855 Sir Walter Scott	Fine large rose.
856 St. Pierre	Pale purple.
857 Thelaire	Fine large rose.
858 White, Wells's	Beautiful delicate white.
859 Yellow, Smith's	Beautiful pale yellow.
860 Zobeide	Small delicate rose.

PERPETUAL ROSES.

861 Belle Fabert	Very large bright red.
862 — Nanette	Very large blush.
863 Cent feuille	Fine red.
864 Du Roux	Large deep red.
865 Four Seasons	Fine rose.
866 Grand Perpetual	Very large deep rose.
867 Josephine Antoinette	Small rose.
868 La Mienne	Rosy purple.
869 Louis Philippe	Large dark crimson.
870 Monstrous Four Seasons	Large delicate rose.
871 Palmire	Fine pale blush.
872 Perpetual Scotch	Blush, very double.
873 Perpetuelle d'Angers	Large delicate blush.
874 Pomponne Four Seasons	Delicate blush.
875 Queen of Perpetuals	Fine pale blush.
876 Rosa Pœstana	Semi-double crimson.
877 Rose du Roi	Beautiful bright crimson.
878 Sixth of June	Very double blush.
879 Stanwell Perpetual	Fine flesh-colour.
880 White Four Seasons	Beautiful white.

HYBRID ROSES.

881 Amelie Guerin	Fine white.
882 Antiope	Small shaded purple.
883 Attelaine de Bourbon	Beautiful large bright rose.
884 Beaute Vive	Small fine rose.
885 Belle de Bengal	Bright rose.
886 Bizarre de la Chine	Crimson globe.
887 Bonne Genevieve	Fine dark purple.
888 Brennus	Globe red.

NAMES.	DESCRIPTION.
889 Camuse Carne	Pretty blush colour.
890 Carmin Feu.	Large compact red.
891 Celine	Large pale blush.
892 Celestial	Beautiful blush.
893 Clair de Crassac	Pretty cherry-colour.
894 Colonel Fabvier	Large bright rose.
895 Coronation	Shaded dark and light purple.
896 Coupe d'Amour	Fine bright rose.
897 Duke of Devonshire	Fine large lilac, striped with white.
898 Eliza Fenning	Small fine blush.
899 Ethereal	Beautiful purple.
900 Fulgens	Large fine fiery crimson red.
901 General Paget	Fine rosy pink.
902 Hybride Blanc	Very double white.
903 King of Roses	Fine violet.
904 La Cerisette	Large red.
905 Lady Stuart	Very large globe blush.
906 La Grandeur	Large fine rosy crimson.
907 — Tourterelle	Lead-coloured, cupped.
908 Lilac Queen	Deep lilac.
909 Miralba	Small dark crimson.
910 Morning Star	Very large globe purple.
911 Ne plus ultra	Large round red.
912 Pourpre Panachee	Fine shaded purple.
913 Reine de Belgique	Globe rosy lilac.
914 Roi de Prusse	Purple.
915 Rose Blairii	Fine globe rose.
916 — Chateleine	Large rosy purple.
917 — Montan d'Angers	Fine large dark purple.
918 Sebastiana	Fine dark crimson.
919 Seulistienne	Small flesh-coloured.
920 Susette	Fine dark crimson.
921 Targelie	Large reddish purple.
922 Thisbe	Pale blush, nearly white.
923 Thornless Violet	Dark puce velvet.
924 Triomphe d'Anger	Globe rose.
925 — de Guerin	Large rosy blush.
926 — Laffay	Delicate white.
927 Victor Hugo	Large rosy lilac.
928 — Tracy	Large dark crimson.
929 Wellington, Lee's	Purplish crimson.

L'ISLE DE BOURBON ROSES.

930 Aristide	Small purple lilac.
931 Chloe	Large fine blush pink.
932 Faustine	Flesh-colour.
933 General Dubourg	Beautiful large rose-colour.
934 Jeanne d'Albrez	Small lively rose.
935 L'Isle de Bourbon	Fine rosy crimson, semi-double.
936 Madame Desprez	Large bright rose.
937 Velede	Large blush.

CHINA ROSES.

938 Admiral de Regini	Small semi-double purple.
939 — du Perri	Large dark red.
940 Atropurpurea	Small dark purple.
941 Barclayana	Semi-double rose.
942 Beau Carmin	Fine deep crimson.
943 Belle d'Amosa	Beautiful crimson, curiously tinged with white.
944 — Amour	Fine bright red.
945 — de Monza	Fine crimson and purple.

NAMES.	DESCRIPTION.
946 Belle de Plaisance	Small semi-double scarlet.
947 — Traversi	Small blush white.
948 — Villorosi	Small dark red.
949 Bengallensis Pallida	Very pale blush.
950 — Rubra	Large rose.
951 Camellia Blanco	Beautiful large white.
952 — Rouge	Fine red.
953 Countess of Albemarle	Fine large rosy blush, dark in the centre.
954 Cramoisse Superieure	Large bright crimson.
955 — Triomphante	Large very fine crimson.
956 Duchesse de Berri	Very compact red.
957 Frangrantissima à Odeur	Beautiful scented large blush.
958 Glorie d'Anteil	Very dark crimson.
959 Gracile	Large delicate rosy pink.
960 Ignescens	Small fiery red.
961 Indica Gloriosa	Very large fine rose.
962 — Minor Blush	Small blush.
963 — Rubra	Small red.
964 — nana	Small pink.
965 — superba	Fine bright rose.
966 Lawrenceana	Very small pretty rose.
967 Marie Louise	Fine large rose.
968 Nouvelle Pivoine	Very large blush.
969 Petite Triomphe	Small shining red.
970 Strombio Rubra	Fine globe red.
971 Triumph of Ghent	Large bright rose.
972 White	Very pure.
973 Willow-leaved	Semi-double bright rose.

SCOTCH ROSES.

974 Adelaide	Large fine red.
975 Appollo	Large red.
976 Blanda	Large marbled blush.
977 Daphne	Pinkish lilac.
978 Flora	Semi-double dark red.
979 Guy Mannering	Large light blush.
980 Ivanhoe	Large very deep blush.
981 Juno	Marbled red.
982 La Neige	Fine pure white.
983 Painted Lady	White and crimson, prettily striped.
984 Pluto	Very dark red.
985 Purpurea	Reddish purple.
986 Queen of May	Bright carmine.
987 Sulphurea	Straw-colour.
988 True Yellow	Large fine sulphur-colour.
989 Venus	Crimson red.

MUSK ROSES.

990 Blush	Semi-double pale blush.
991 Fringed	Small compact white.
992 Nepalensis pleno alba	Yellowish white.
993 — rubra	Light red.
994 Princess de Nassau	White, with a yellowish centre.

TEA-SCENTED ROSES.

995 Belle Felix	Fine bright rosy lilac.
996 Bourbon	Very large white globe.
997 Boutelaae	Fine large delicate pink.
998 Hymenee	Fine white, with a yellowish centre.
999 Jeanne Panachée	Fine straw-colour and delicate rose.

NAMES.	DESCRIPTION.
1000 Large crimson	Large splendid crimson.
1001 La Surprise	Small delicate rose.
1002 Reve du Bonheur	Rosy blush, with a yellow centre.
1003 Roi de Siam	Large beautiful pure white.
1004 Strombio	Fine cream-colour, tinged with blush.

ST. PATRICK.

[The Article on Roses, as sent by our correspondent, to the amount of a thousand kinds, is now closed. We have had much pleasure in inserting it; because we think that it will be a standard to ascertain the correctness of kinds cultivated, as well as afford direction to the selecting of sorts for a collection, so that the various colours may be chosen, and thereby produce the greater contrast. Those persons who admire and cultivate this most beautiful class of plants will, we believe, appreciate with ourselves the value of the above list, however lengthy it has been. A correspondent has just sent us a small list of some additional kinds, which we shall insert in some future Number; and as new sorts appear, we purpose giving their names and colour, and the class to which they belong. This will afford information, as well as discover imposition, if practised, from persons not selling the correct kinds; and we are sorry that instances of that nature have been practised.—COND.]

ARTICLE VIII. — *On Plants which are peculiarly adapted for Planting in Masses; each kind being showy and profuse in Flowering.* By FLORA.

(CONTINUED FROM PAGE 253.)

Commelina cælestis, Sky-blue Commelina. Triandria, Monogynia. Commelineæ. The splendid blue flowers of this plant cannot be excelled, and its profusion of blossoms renders it deserving of cultivation in every flower-garden. With me the plant blooms from the middle of June to October. The roots are tuberous, and keep well through winter, if taken up after the blooming season, and preserved like Dahlia roots. Plants from the old roots grow, in good soil, from three to five feet high; those from seeds reach only from one to two feet. The following is the mode of management I have practised for the last two seasons:—I fixed upon a circular bed, eight feet in diameter; and the first week in May I planted four feet of the centre with the old roots, placing the crowns just under the surface of the soil. The outer portion of the bed I planted with *spring-sown* plants, that had been raised in pots placed in a frame. Both the roots and plants were planted about six inches apart. Thus the centre of the bed being much higher than the outer part, the appearance was that of a splendid blue cone of flowers, scarcely to be excelled in beauty. Seeds are produced in abundance, and may be obtained of seedsmen at a small cost.—(*To be continued.*)

PART II.

NEW PLANTS

WHICH HAVE APPEARED SINCE OUR LAST.

IN our former Numbers, we have always given a complete list of plants as figured in the periodicals of the preceding month. This, we have been given to understand, is an annoyance to the Conductors of those publications. We shall, therefore, discontinue it, and in future present to our readers a monthly alphabetical list of such NEW plants as may come under our notice during the month; and we shall spare no trouble to make it as complete as possible, avoiding what was inevitable in our former plan, the naming and describing many old and worthless plants.

Acacia plumosa, Feathery Acacia. (*Bot. Mag.*) This climbing species of Acacia will require a conservatory or greenhouse protection in this country. Its fine carved plumes of foliage would have an imposing appearance if grown in a conservatory, and the spikes of its yellow flowers would make it additionally attractive. In Madeira, where it is cultivated in the open air, it must be a desirable and ornamental appendage to a residence. The plant belongs to the class Polygamia, and order Monœcia; natural order, Leguminosæ, the pea tribe of flowers. The name Acacia is from *akazo*, to sharpen, most of the Acacias being thorny.

Adesmia Loudonia, Loudon's Adesmia. (*Bot. Reg.*) Neither the plant nor the flower of this new Chilian shrub are striking; the former are small, of a yellow colour. It has an appearance of the common English Genista, but not near so pretty. It belongs to the 10th class, Decandria, and 1st order, Monogynia; natural order, Leguminosæ. Adesmia is derived from the Greek *α*, prio, and *desmon*, a union; the separation of the stamens.

Azalea indica variegata, variegated flowered. (*Bot. Reg.*) Mr. KNIGHT, nurseryman, King's-road, Chelsea, is in possession of this new and fine-flowered Chinese Azalea. Its beautiful white flowers, suffused with a fine rose-colour, produce a most pleasing effect. The plant well merits a situation in every collection. Azalea belongs to the 5th class, Pentandria, and 1st order, Monogynia; natural order, Ericæ. The name is derived from *azaleos*, dry; habitation.

Batemannia Colleyit, Colley's Batemannia. (*Bot. Reg.*) This handsome flowering orchideous plant from Demerara, has a singular and striking appearance, the sepals of the blossoms being brown and purple, tipped with green, the labellum white and yellow. It belongs to the 20th class, Gynandria, and 1st order, Monandria; natural order, Orchideæ. The name from JAS. BATEMAN, Esq.

Billardiera ovalis, oval-leaved. (*Bot. Reg.*) This climbing plant very much resembles *Sallyx heterophylla*, but the flowers are of a greenish yellow colour. As it is from Van Dieman's Land, no doubt it will thrive in the open air in this country, if favoured with a warm situation. Plants of it may be had of Mr. LOWE, of the Clapton Nursery. The plant belongs to the 5th class, Pentandria, and 1st order, Monogynia; natural order, Pittosporæ. Billardiera, from LA BILLARDIERE, a French botanist.

Calceolaria crenatiflora, var. *Knyperstiensis*. (*Brit. Flow. Gard.*) This handsome hybrid, raised at Knyperly Hall, Staffordshire, is a valuable addition to this pleasing tribe of plants. The bright yellow flowers, with a large spot of chocolate velvet colour, and the corolla being of a superior

size, render it a striking object. This species is known in some collections as *C. pendula*; and, like it, the present variety will not grow higher than a foot, if grown in the open air; but if kept in-doors, it will of course grow taller, and, we think, make a better appearance. We hope the kind will soon be in the hands of Messrs. POPE & SONS, nurserymen, near Birmingham, whence it might then be obtained. *Calceolaria* belongs to the 2d class, Diandria, and 1st order, Monogynia; natural order, Scrophularinæ. The name is from *calceola*, a slipper; the flower resembling a shoe or slipper.

Deutzia scabra, rough-leaved. (*Bot. Reg.*) This small new Japan shrub, with its white blossoms, in racemes, and in appearance like the small flowers of a common *Syringa*, will doubtless be an acquisition to the pleasure-ground; and as it will be quite hardy in this country, we hope it will be distributed from the London Horticultural Society's Garden, so as to be spread through the country before long. The plant belongs to the 10th class, and 3d order; natural order, Philadelphica, *Syringa* tribe of flowers.

Kennedia nigricans, dark-flowered. (*Bot. Reg.*) From the report of the London Horticultural Society's Meetings, it appears that this new and striking species of *Kennedia* was exhibited at the Room in Regent-street, on April 1st, by BOYD MILLER, Esq., who had raised it from seed. There appears to be another new species in cultivation by Messrs. BUCHANAN & Co., of Camberwell Nursery. In the species they possess, the flowers are of a dark purple, with a patch of yellowish green; the foliage large. The species exhibited by Mr. BOYD MILLER had smallish foliage, and the flowers very dark, said to be black, and a yellow patch. Such is the account we had from a most respectable London nurseryman. Both species are well deserving of cultivation; and being natives of New South Wales, will flourish as a greenhouse twining plant, either to cover a trellis or a supporting pillar. All the species produce seed freely, as well as strike by cuttings. Sandy peat soil and well-drained pots are essentials in the culture. The plants belong to the 17th class, Diadelphia, and — order, Decandria; natural order, Leguminosæ, pea tribe of flowers. The name *Kennedy*, after LEWIS KENNEDY, Esq.

Malva Munroana. (*Bot. Gard.*) This plant is a hardy perennial, grows three feet high; the flowers are small, of a brownish red, rather uninteresting, compared with other kinds of Mallow. The plant belongs to the 16th class, Monadelphia, and 8th order, Polyandria; natural order, Malvaceæ. *Malva*, from *malake*, soft; referring to its medicinal properties.

Malesherbia linearifolia, linear-leaved. (*Bot. Mag.*) This is a very pretty *Chilian* plant, and merits general cultivation in the green-house. The plant not growing more than half a yard or two feet high, and producing panicles of purplish blue blossoms, each about an inch across, renders it a desirable species. As it is grown in the Glasgow Botanic Garden, we doubt not but it will soon be in general circulation. The plant belongs to the 5th class, and 3d order; natural order, Passifloreæ. The name is from L. MALESHERBES.

Oenothera Drummondii. (*Bot. Mag.*) This is a very pretty Evening Primrose, and its fine yellow flowers give a striking effect during autumn, and are valuable for the flower-garden. *Oenothera* belongs to the 8th class, Octandria, and 1st order, Monogynia; natural order, Onograriæ. The name is from *oinos*, wine, and *thera*, catching; acquired smell.

Rhododendron macranthum, large-flowered. (*Brit. Flow. Gard.*) This is the *Azalea indica lateritia*, noticed in the *Cabinet*, Vol. II., p. 237. We cannot avoid recommending it to all the admirers of this tribe of plants. Being of a low growth, and blooming profusely, it is very desirable. The plant belongs to the 10th class, and 1st order; natural order, Ericæ. The name is from *rhodo*, a rose, and *dendron*, a tree.

Silene chlorefolia, Chloro-leaved Catchfly. (*Brit. Flow. Gard.*) A hardy perennial plant, with flowers pure white above, and purplish underneath. It will be useful to the flower-garden in summer, growing only a foot high. The plant belongs to the 10th class, and 3d order; natural order, Caryophyllæ. *Silene*, from *sialon*, saliva; in allusion to the viscid, frothy moisture of the stalks of some species.

PART III.

MISCELLANEOUS INTELLIGENCE.

A LIST OF DAHLIAS

THAT HAVE OBTAINED THE GREATEST NUMBER OF PRIZES DURING 1834,
AT THE VARIOUS FLORICULTURAL AND HORTICULTURAL EXHIBITIONS.

Our floricultural friends having sent us accounts of a great number of Dahlia exhibitions that have taken place throughout England, Scotland, and Wales we have selected some of the kinds that have won the greatest number of prizes, in order that our readers may have a knowledge of those which are considered to possess the most superior properties as to colour and form. Some of the kinds in each class of colour are very new, and but little spread through the country; consequently, although very superior in their class, the range of exhibition being necessarily limited, has prevented their attaining that station in the list which they deserve: such of them, however, as we know to be good ones, are marked with an asterisk (*). The mode of exhibiting the flowers in stands or pans containing 4, 6, 12, 50, or 100 kinds, having become very general in the South of England, and many of the finest sorts having been thus exhibited, we have given the accounts, as forwarded to us, of some of the best exhibitions in this manner. We observe, in the accounts of exhibitions sent us, that the flowers of each class of colour are shown by themselves when to any extent, and that the judges select three, six, twelve, &c. of the best flowers out of the lot, commencing with the first best flower, second ditto, &c.; and from such decisions the following table is taken. P.p. signifies a *premier prize*,—that is, the prize offered for the best bloom of any colour, exhibited in the whole. The table is thus arranged, viz. King of the Whites, one *premier prize*, seven *first prizes*, five *second prizes*, five *third prizes*, &c.; in all, gaining 27 prizes

WHITE.											
Names.	P.p.	1	2	3	4	5	6	7	8	9	10 Tot
King of the Whites.....	1	7	5	5	3	3	2	1			27
Harpalyce.....		1	1	2	1	3	1			2	11
Paper White			3				6		2		11
Dennis's Queen of the Whites ..	2				3		2	2	1		10
Desdemona					1	5	2				8
Mount of Snow				1			1	2			5
Alba multiflora		1		1		1					3
Transcendant			1	1			1				3
*Camelliadflora alba.....	1	2									3
BLUSH.											
Blush Lilac.....		4	2	2		3					11
Pencillia		2	2		3	1	1				9
Hermione.....		3	3	2							8

Names.	Prizes.										Tot	
	P.p.	1	2	3	4	5	6	7	8	9		10
Wells's Perfection		4	4									8
Lady Fordwich		6	2									8
Marchioness of Abercorn		5	2	1								8
Harriet Martineau		1	3		3							7
Juliet			4	2		1						7
EDGED.												
Queen of Dahlias		10	3	3	1	4	3					24
Beauty of Sheffield		4	2	5								11
Criterion		3	2		2	2	1					10
Readii			1	3			2					6
Hall's Ranunculiflora			2		1	2						5
Andromeda		3	2									5
SPOTTED.												
Priestley's Enchantress		3	2		4		2			1		12
Levick's Incomparable	1	5	3		1	1						11
Guttatus					2	2		1	2			7
Daphne				2	1		1					4
Isabella		2	1		1							4
Queen of Belgium		3	1									4
LILAC.												
Royal Lilac		2	3	1	5	1						12
Neptune		1	2	3	2	1						9
Superb Lilac		3		3	4		1					8
Countess of Harrington			4		2			1				7
Willison's Theodore		1	2									3
Zamia		3										3
Widnall's Phillis		1										1
Violet		1										1
Lady Hilda		1										1
Fair Ellen			1									1
Grandiflora		1										1
ROSE.												
Widnall's Perfection	1	8	6	5	1	3	1					25
Lady Grenville		5		3		5	2					15
Surpasse Triomphe Royale		2	3	1	2							8
Miss Pelham		2	2	3	1							8
Young's New Rose		1	3		1	1						6
Lord Byron		1	2	2								5
Elizabeth		1	3		1							5
Galanthus		1	2		1					1		5
SHADED.												
Belladonna		5		3	2			1				11
Brewer's Fairy Queen		3	3	1		1						8
Colville's Perfecta		4	3		1							8
Levick's Wilberforce			1									1
Picta						1						1
Widnall's Iris				1								1
BUFF.												
Maid of St. Leonard's		1	2	1	4	1	1					10
Flora Macdonald			1	1								2
Willison's John Benson		1										1
Seedling			1									1
STRIPED.												
Levick's Commander-in-Chief	1	3	5	2	3		1					15
Picta Formosissima		4	2	2	2	1	1		1	1		14
Zebra		1	1	2			1	1	1			7
Widnall's Black Prince		1	2	2								5

Names.	Prizes.										Tot.	
	P.p.	1	2	3	4	5	6	7	8	9		10
Crowther's Zebrina	1	1	1	1								4
Metropolitan Stripe				1		1		1			1	4
Linn's Stripe			1	1	1		1					4
Lady Dundas		1	1									2
YELLOW.												
Widnall's Jason		6	3	1	3	2	1					16
Queen of Yellows		2	3	3			1					9
Squibb's Pure Yellow.....		1	3		2	1						7
Widnall's Comus.....		2	2	1	1							6
Dwarf Yellow					1	1	2					4
Queen of Sheba		4										4
Levick's Seedling			1					1				2
Emperor	1											1
Brown's Midas.....			1									1
Jeauune Insurmountable				1								1
ORANGE.												
Widnall's Prince of Orange	1	4	5	3	4	2	1					20
Levick's Lord Milton.....			1	3		2	2	3				11
Widnall's Aurora					3		1	2				6
Levick's Yorkshireman			1	1								2
— Caradoria					1							2
Eximia.....				2								2
RUBY.												
Beauty of Camden			3	2	4							9
Widnall's Ajax				1								2
Dennissii					1							2
Donna Maria					1	1						2
PURPLE.												
Lord Liverpool.....			7		4		3			1		15
Widnall's Granta			8	5	1			1				15
Purpurea Elata	1	2	2	2	1	1	1	1				9
Barratt's Susannah				2		2	1	1				6
Douglas's Augusta			2			1	1					5
Plant's Purpurea Perfecta			1	2			1					4
King of the Purples		1	3									4
Plutus				2	1							3
SCARLET.												
Countess of Liverpool.....	1	6	5	3	1	3	2					21
Coccinea speciosissima		3	1	4		2			2			12
Connelly's Queen Adelaide			2	2			3					7
Laes of Richmond Hill			2		3	1						6
Aurora			4									4
Widnall's Rising Sun.....					2				1	1		4
— Duchess of Bedford ..			1	1	1							3
Beauty of the Vale.....			2	1								3
Daniel O'Connell			1	2								3
Dennissii coccinea			1	1								2
CRIMSON.												
Springfield Rival.....	1	6	2	2	3		1					15
Levick's Shannon			3	2	4		1					10
Prince George of Cumberland ..			2	3		1	1	2				9
Levick's Homer			1	1								2
— Rachael.....					1		1					2
Doctor Franklin						2						2
Lady Fitzharris				1			1					2
Hon. Mrs. Talbot		1	1									2

Names.	RED.										Tot.
	P.p.	1	2	3	4	5	6	7	8	9	
Tarrecia		1	1	1	1						5
Carolus		1	3								4
Newsall's Victory		1	1			1					3
Cicero			1		1		1				3
Beauty of Hertford		1			1		1				3
Levick's Mountaineer		1									1
DARK.											
Lord Derby		3	2	1		2	3				11
Hall's Mogul		2	3	2				1			8
Negro Superb		3	4								7
— Boy				2		1	3				6
Paganini			2	2	1						5
Rammohun Roy				1			1				2
Dawson's Victory				1		1					2
Mont Gibberloo	1	1									2
Othello		1	1								2
Foster's Niagara				1						1	2

The following Dahlias were exhibited in stands, or pans :—

CAMBRIDGE HORTICULTURAL SOCIETY, SEPT. 10TH.—*Stands of twelve blooms*.—First prize, for Springfield Rival, Levick's Incomparable, Brewer's Paragon, Foster's Niagara, Queen of Dahlias, Criterion, King of the Yellows, Granta, Inwood's Ariel, Willmott's Superb, Widnall's Perfection, and Picta formosissima, to Mr. Brewer.—Second prize, for Lord Derby, Sir Robert Peel, Jason, Criterion, Granta, Rising Sun, Countess of Liverpool, Phyllis, King of the Whites, Black Prince, and two seedlings, to Mr. Widnall.—Third prize, for Countess of Liverpool, Queen of Dahlias, King of the Whites, Rising Sun, Jason, Prince George of Cumberland, Perfection, Springfield Rival, Granta, Picta formosissima, Ariel, and Neptune, to Mr. Searle.—*Stands of six blooms*.—First prize, for Criterion, Neptune, Granta, Queen of Dahlias, Countess of Liverpool, and Widnall's Jason, to Mr. R. Headly.—Second prize, for Queen of Dahlias, Queen of Sheba, Springfield Rival, Perfection, King of Dahlias, and Picta formosissima, to Mr. Widnall.—Third prize, for Rose d'Amour, Victory, Lady Dundas, Cassino, and two seedlings, to Mr. Brewer.

DONCASTER HORTICULTURAL SOCIETY, OCT. 9TH.—*Pans of twelve blooms*. First prize, for Queen of Sheba, Negro Superb, Picta formosissima, Camelliaflora, Queen of Dahlias, Coccinea perfecta, Enchantress, Negro Boy, Wells's Perfection, Beauty of Camden, Zamia, and Lord Liverpool, to Mr. Stone.—Second prize, for Picta formosissima, Charming Phyllis, Lass of Richmond Hill, Negro Boy, Commander in Chief, Queen of Dahlias, Aurora, Jason, Lord of Hallamshire, Queen of the Whites, Mrs. Talbot, and Prince George of Cumberland, to Mr. Appleby.—Third prize, for Queen of Dahlias, Landgravine, Yellow Turban, Lass of Richmond Hill, Queen of the Whites, Barratt's Susanna, Prince George, Young's New Rose, Negro Boy, Eximia, Picta formosissima, and Cicero, to Mr. Appleby.—*Pans of six blooms*.—First prize, for Purple Perfection, Countess of Harrington, Seedling, Shannon, Springfield Rival, and Seedling, to Mr. Levick.—Second prize, for Mrs. Talbot, King of the Whites, Queen of the Yellows, Incomparable, Unknown, and Picta formosissima, to Mr. Jackson.—Third prize, for Lady Grenville, Countess of Liverpool, Widnall's Perfection, Barratt's Susanna, ———, and King of the Whites, to the Rev. H. Branson.

NEWICK HORTICULTURAL SOCIETY, SEPT. 4.—*Stands of twelve blooms*. First prize, for Granta, Aurea, Countess of Liverpool, Queen of Dahlias, Pencillia, Picta Formosissima, Hermione, Widnall's Perfection, Springfield Rival, Camelliaflora alba, Levick's Incomparable, and Priestley's Enchantress, to Mr. Mitchell, florist, &c., Piltown.—Second prize, for Queen of

Sheba, Albion, Picta formosissima, Adelfa, Elphinstone's Polyphemus, Alba purpurea, Negro Boy, Countess of Liverpool, Queen of Violets, Widnall's Perfection, Queen of Dahlias, and Fair Ellen, to Mr. Mitchell, florist, Brighton.—Third prize, for Widnall's Perfection, Marquis, Queen of Sheba, Countess of Liverpool, Queen of Dahlias, Elphinstone's Polyphemus, Neptune, Springfield Rival, Picta formosissima, Levick's Incomparable, King of the Whites, and Priestley's Enchantress, to Mr. Hudson, at Mrs. Law's, Little Horsted.—Fourth prize, for Widnall's Perfection, Springfield Rival, Painted Lady, Picta formosissima, Alicia, Metropolitan Blush, Wells's Polyphemus, Elphinstone's Polyphemus, Forster's Erecta, Granta, Purpurea elata, and Lady Fordwich, to Mr. Elphinstone, Holm Bush.

NOTTINGHAM FLORAL AND HORTICULTURAL SOCIETY, SEPT. 10.—*Stands of ten blooms*:—First prize, for Lord Derby, Granta, Perfection, Duchess of Bedford, Aurora, Emperor of Yellows, Belladonna, Queen Elizabeth, Queen of Dahlias, and King of the Whites, to Mr. Spencer.—Second prize, for Marshall's William, Springfield Rival, Perfection, Countess of Liverpool, Prince of Orange, Queen of Yellows, Enchantress, Taunton Rose, Queen of Dahlias, and Transcendenta, to Mr. Buckwell.—Third prize, for Negro, Lord Liverpool, Perfection, Springfield Rival, Countess of Liverpool, Jason, Levick's Incomparable, Picta formosissima, Julia, and Emperor of the Whites, to Mr. Neville.

SHEFFIELD AMATEURS' AND FLORISTS' SOCIETY, SEPT. 1st.—*Pans of six blooms*:—First prize, for Aldam's Yellow, Widnall's Perfection, Levick's Mozart, Hero Française, Queen of Whites, and Wilberforce, to Mr. Levick.—Second prize, for Lord Liverpool, Miss Pelham, Countess of Liverpool, King of the Whites, and two seedlings, to Mr. Alsebrook.—Third prize, for Lord John Russell, Queen of the Roses, Augusta, Lady Grenville, Queen of the Whites, and Susiana, to Mr. Taylor.

SECOND MEETING, OCT. 6TH.—*Pans of six blooms*:—First prize, for Harriet Martineau, Mogul, Lord Milton, Shannon, Lady Harrington, and Tarrecia, to Mr. Levick.—Second prize, for Springfield Rival, Picta formosissima, Lord Liverpool, Harpalyce, Colville's Perfecta, and Lord Milton, to Mr. Alsebrook.—Third prize, for Midas, Sir Robert Peel, Springfield Rival, Daniel O'Connell, Neptune, and Lord Liverpool, to Mr. Turner.—Fourth prize, for Picta formosissima, Rammohun Roy, Auroro, Comus, Plant's Purpurea, and Tarrecia, to Mr. Davy.

WOOLWICH FLORISTS' SOCIETY, SEPT. 30.—*Stands of twelve blooms*:—First prize, for Ariel, Augusta, Beauty of Camden, Metropolitan Blush, Purpurea elata, Lady Fordwich, Criterion, Lilac Perfection, Metropolitan Calypso, Metropolitan Perfection, Glenny's 105, and Alicia, to Mr. Glenny.—Second prize, for Douglas's Prince of Orange, Lady Fordwich, Beauty of Camden, Ariel, Criterion, Lilac Perfection, Metropolitan Blush, Widnall's Rising Sun, Rival Yellow, Springfield Rival, Metropolitan Perfection, and Pencilled White, to Mr. Harding.—Third prize, for Lady Fordwich, Purpurea elegans, Metropolitan Blush, Polyphemus, Dennissii, Criterion, Granta, Marchioness of Abercorn, Queen of Dahlias, Springfield Rival, Beauty of Sheffield, and Widnall's Perfection, to Mr. Newhall.

[We have received descriptions, as to colour, form, and height, of about twenty of the new Dahlias coming out next season; the particulars of which we shall give, along with others, in our January Number.—COND.]

AURICULAS.

GREEN-EDGED.

Names.	Prizes.						
	P.p.	1	2	3	4	5	6 Tot.
Lee's Colonel Taylor	3	5	4	3		1	16
Booth's Freedom	4	2	3	1	3		14
Stretche's Alexander	1	3	1	2		3	11

Names.	P.p.	Prizes.						Tot.
		1	2	3	4	5	6	
Pollitt's Highland Laddie	4	2	1	2			1	10
Buckley's Jolly Tar	3		2			3		8
Moore's Jubilee	1	2	1	2			1	7

GREY-EDGED.

Grimes's Privateer	3	6	3	5	1	1		19
Taylor's Ploughboy	1	7	2		1	2		13
Kenyon's Ringleader	1	7	3	1				12
Conqueror of Europe	2	5	1	1				9
Thompson's Revenge		3	2	1	2			8
Warris's Union		1	4	2		1		8

WHITE-EDGED.

Taylor's Glory	2	6	3	5	1	2	1	20
Hughes' Pillar of Beauty	1	4	4	6	2	2	1	19
Lee's Bright Venus		4	5	3	3	1	1	17
Ashworth's Rule-All	1	3	1	2		3	2	12
Potts's Regulator		4	2			5	1	12
Taylor's Favourite		3	4	1	2			10

SELFS.

Flora's Flag	1	7	3	2	1	3	1	18
Bedmain's Metropolitan		6	2	5	2	1	1	17
Scholar's Ned Lud		4	4	2	1	5		16
Berry's Lord Lee		4	3	2	5		1	15
Lord Primate	1	3	4	1		1		10
Apollo		2	1	3	2	1	1	10

POLYANTHUSES.*

Pearson's Alexander	3	21	3	1	1			29
Buck's George the Fourth		5	4	2	3	4		18
Cox's Prince Regent	1	2	3	6		3		15
Collier's Princess Royal	1	3	3		2	1	1	11
Crownshaw's Invincible	1	2	6			1		10
Eckersley's Jolly Dragoon		2	2	5	1			10
Nicholson's Bang Europe		1	3	3				7
Lord Crewe (George Canning)		2	2	1	1			6

TULIPS.

BIZARRIES.

Surpasse Catafalque	4	12	3	1	6	5	2	33
Surpasse La Cantique	6	9	4	2	3	1	3	28
Duc de Savoi	3	3	2		6	5	5	24
Trafalgar	4	2	5	3	5	2		21
Goud Beurs	1	4	3	6	3		1	18
Firebrand	1	3	1	5	2	4		16

BYBLOEMENS.

Baquet	8	3	2	7	1	1	3	25
Incomparable	2	6	5	3	5	2	2	25
Washington	3	3	2	5	2	4	1	20
Bienfait	2	2	1	4	3	5	1	18
Gaystella		1	3	2	5	1	2	14
Maitre Partout	2	2	1	3		4	1	13

* The following are superior kinds; but some being new, have, as yet, a limited circulation amongst the cultivators of Polyanthus:—Barker's William the Fourth, Billingsgate Queen, Lord John Russell, Buck's Black Prince, Beauty of Coven, Burnard's Formosa, and Earl Grey.

	PAGE.
Anemone, Query on the Double White	69
Culture of the	70—102
Query on the	22—93—188
On the Properties of a Good	143
Annuals, On the Propagation of	79
An Old Carnation Grower, Query by	94
Anthurium gracile, Noticed	18
Anthyllis Webbiana, Do.	16
Ants, Answer on Destroying	67—94
Aotus, Culture of the Genus	33
Aphis, Query on Destroying	189
A Poor Cottager, Queries by	291
Appleby, Mr. Thomas, On Culture of Salpiglossises	52
On the Culture of Gloxinias	105
On the Culture of Dutch Bulbs	448
April, Floricultural Calendar for	96
Arabis verna, Noticed	158
A Reader, Query by	260
Arbutus tomentosa, Noticed	136
Ardisia, Query by	261
excelsior, Query on	261
Aristolochia chilensis, Noticed	158
Armstrong, E., On the Culture of Tigridia Pavonia	132
On Plants for a Bed upon a Lawn	151
Answer on Balsams, by	189
Answer on Fuchsia, by	189
Artanena fimbriatum, Noticed	112
A. S., On raising Chelone barbatum from Seed	274
Ashford, Mr. F. F., On the Culture, &c. of Plants	31
On the Culture of Dutch Bulbs in Pots	55
Query by	187
On the Culture of Heliotropium	193
On a Plan of a Flower Garden	222
On the Culture and Propagation of Plants	225
Remarks by	119
Observations on Soils and Manures, by	268
Ashley, Mr. G., Query by	261
Aster eminens, var virginicus, Noticed	90
puniceus, Noticed	41
Seeds, Query on Saving German	162
Asterisk, Query by	164
A Subscriber, Query by	21—94—163—188—292
On Destroying Ants	94
On Preserving Annuals from Slugs, &c.	190
Augustus Lewis, Query by	162
August, Floricultural Calendar for	192
Auricula, On Culture of the	25—199—266
On the Properties of a Good	118—143
Answer on the Culture of the	189
Query on the	93—115—141—261
A word or two on Culture of the	169
Query on Davey's Champion, &c.	163
s, Query on some Prize	163
A List of, that have obtained the most Prizes during 1834...	287
Author of the "Domestic Gardener's Manual," On Culture of Justicia flavicoma	27
Author of the "Domestic Gardener's Manual," On the Propagation of Annuals	79
Author of the "Domestic Gardener's Manual," On Striking Cuttings in Water	241
Author of the "Domestic Gardener's Manual," Reply by	293
A Well-wisher, Query by	69—163

	PAGE.
<i>Azalea indica</i> var <i>laterita</i> , Noticed	237
<i>indica</i> variegata	281
Balsams, Query on	187
Answer on the Culture of	189—292
Remarks on	239
Banton, Mr. J., On Compost for Carnations	106
Answer by	118
Baptisia, Culture of the Genus	34
Barratt, Mr. William, A Select List of Pansies	202
On varieties of Fuchsias	176
On Culture of <i>Erythrina crista galli</i> in the open border	218
Bartholina pectinata, Noticed	91
Batemannia Colleyii	281
B. E., Answer on the Pomegranate by	94
Beauty of Sheffield Dahlia, Reference to Plate	24
Begonia heracleifolia, Noticed	112
Belladonna Lily, Query on the	139
Beloperone oblongata, Noticed	92
Benthamia fragifera, Remarks on the	23
Reference to Plate	71
Bignonia, Query on the	21—115
On the	70
Answer on Striking Cuttings of	292
Billardiera ovalis	281
Billbergia purpurea rosea, Noticed	90
Bletia Shepherdii, Noticed	136
B. M., Query by	44
Botanical Chart, Reviewed	134
Bouvardia triphylla, Culture of the	251
Brachysema, Culture of the Genus	34
British Ferns, Remarks on	29
Brugmansia, Query on the	44
Budding, On the Different Modes of	210
Burnard's Formosa Polyanthus, Reference to Plate	167
Burtonia, Culture of the Genus	34
C., Query by	187
C. C. C. C., Query by	262
Cactus, On the Culture of the Genus	175
speciosissimus, Culture of	171
Answer on	292
Caladium fragrantissimum, Noticed	108
grandifolium, Do.	208
Calandrinia discolor, Do.	256
grandiflora, Culture of the	204
Reference to Plate	47
Calanthe densiflora, Noticed	62
Calceolaria arachnoidea, var. <i>resurgens</i> , Noticed	63
Reference to Plate	167
crenatiflora, var. <i>Knypersliensis</i> , Noticed	281
formosissimus, Reference to Plate	48
Harrisonia, Do. Do.	239
sessilis, Noticed	19
purpurea picta, Noticed	160
polifolia, Do.	267
Calceolarias, On Raising from Seed	262
On the Culture of, as Greenhouse Plants	84
Calochortus splendens, Noticed	138
venustus, Do.	137
Calythrix virgata, Do.	136
Cambridge Horticultural Society, Rules for Judges	142
Florists' Society Carnation, &c. Show	190

	PAGE:
Campanula divergens, Noticed	259
garganica, Do.	210
macrantha, var. <i>polyantha</i> , Noticed	234
pyramidalis, On Cultivation of	172
Cape Heaths, On Culture of	14-64
Carnation, Query on Hepworth's Leader	238
s and Picotees, On the Culture of	49
Query on Compost for	140-141
On the Properties of	144
Answer on the Spindling of	166
Query, On Raising from Seed	162-163
Pinks, &c. On Propagation of	173
Query on	216
On the Culture of	219
Remarks on	238
List of, that have obtained the most Prizes during 1834	289
On Raising from Seed	243
On Composts for	106
Catasetum Euridum, Noticed	111
semiapertum, Do.	257
tridentatum, Do.	157
Catalogue of Flower Roots, &c., Reviewed	38
Catechism of Gardening, Do.	156
Cælogyne flaccida, Noticed	136
Centaureum Crocodylium, Noticed	21
Cereus speciosissimus, Culture of	139
Ceropegia elegans, Noticed	256
Lushii, Do.	161
Challenge to Show Dahlias	142
Charles, K., Query by	116
Chelone barbatum, On Raising from Seed	274
Chorizema spartioides, Reference to Plate	95
Chrysanthemum indicum, On Culture of	83
Query on	115-163
On Flowering in June	238
Chrysophyllum monopyreneum, Noticed	62
Cineraria maritima, Noticed	160
Cirrhæa Warreana, Do.	20
Cistus acutifolius, Do.	160
argenteus, Do.	160
Clematis campanuliflora, Do.	18
montana, Do.	258
Cleome dendroides, Do.	39
C. N., Query by	141-186
Colenema pulchrum, Noticed	207
Colvillia racemosa, Do.	157
Combretum purpureum, Query on	261
grandiflorum, Noticed	17
Composts, Remarks on	239
Contributor, Query by	262
Convolvulus, Major, Query by	164
Cornus capitata, Remarks on	23
Correa speciosa, Answer on	165
Corrubin, Query by	163
Corydalis bracteata, Noticed	40
Cryptostemma calendulaceum,	185
C. S., Query by	186
Cucumbers, &c., Treatise on, Reviewed	11
Cuttings of Plants, On Striking in Water	241
C. W. J., Query by	216
Cyclobothra alba, Noticed	110
lutea, Do.	111

	PAGE.
<i>Cyclodonthra pulchella</i> , Noticed	111
<i>Gymnosma oblongifolia</i> , Noticed	136
<i>Cynoches Loddigesii</i> , Do.	20
<i>Cypripedium spectabile</i> , Do.	111
<i>Cyrtocilium flavescens</i> , Do.	18
<i>Dahlia</i> , Beauty of Sheffield, Reference to Plate	24
Criterion of a Fine	233
a, Query on	21-140-115
Challenge to Show	142
New and Superb	22
Remarks on some	46-239
On the Deterioration of	58
On the Properties of	144
On Raising from Seed	149-201
On Culture of	198-231
A List of, that have obtained the greatest number of Prizes during 1834	283
<i>Datura arborea</i> , On Culture of	131
<i>ceratacaula</i> , Noticed	223
December, Floricultural Calendar for	294
<i>Delphinium consolida</i> , Do.	21
<i>chinesis</i> , var. <i>alba</i> , Reference to Plate	263
<i>Dendrobium aggregatum</i> , Noticed	209
Denton, Mr. J. B. On the Culture of <i>Cactus speciosissimus</i> by	171
Denyer, Mr. W., On Culture &c. of <i>Geraniums</i>	129
On Culture of <i>Fuchsia virgata</i>	146
<i>Deutzia scabra</i> , Noticed	282
D. G. H., Query by	291
<i>Dianthus libanotes</i> , Noticed	92
<i>Diapensia lapponica</i> , Do.	210
<i>Digitalis hybrida</i> , Do.	260
<i>laciniata</i> , Do.	113
<i>Diplopappus incanus</i> , Do.	209
D. P. Query by	93
Dutch Bulbs, Query on Flowering	140
On Culture of in Pots	55-148
Dwarf Yellow Flowering Plant, On a	22-45-292
Earwigs, Query on	139
Answer on	188
<i>Ebenus cretica</i> , Noticed	258
<i>Echinocactus Eyresii</i> , Do.	257
<i>Echites stellaris</i> , Do.	111
Reference to Plate	167
Edwards, Mr. E., Answer on the Culture of the <i>Auricula</i>	189
Answer on Blooming <i>Agapanthus umbellatus</i>	189
Query by	139
E. J. B., Query by	21
Eliza and Elizabeth, Query by	140
Emily, Query by	117
Emily Tulip, Reference to Plate	71
Enyam Fanny, Query by	186
<i>Epacris grandiflorum</i> , Query on	68
Answer on	164
<i>Epidendrum bicornutum</i> , Noticed	182
<i>nocturnum</i> , Do... .. .	61
<i>Erica codonodes</i> , Do... .. .	209
<i>cinerea</i> , Do... .. .	42
<i>Ewerana pilosa</i> , Do... .. .	19
<i>procumbens</i> , Do... .. .	19
<i>Erigeron asteroides</i> , Do... .. .	160
E. R. W., Query by Do... .. .	44
On a Dwarf Yellow Flowering Plant	45

GENERAL INDEX.

301

	PAGE.
<i>Erythrina crista galli</i> , Culture of, in Open Border	218
<i>Eschscholtzia chilensis</i> , Noticed	158
<i>Euphorbia atro-purpurea</i> , Do.	136
Evergreens, Query on	261
Answer on	261
<i>Fabago major</i> , Noticed	68
Fancy Flower Garden, On a	47
February, Floricultural Calendar for	48
Ferns, Remarks on British	29—119
On Culture of	53
On Arrangement of	81
<i>Ficus comosa</i> , Noticed	90
Flora's Dial and Calendar, On	141
Flora, Query by	260
On Plants adapted for Masses	203—228—251—280
Florist Flowers, On Compost for	217
Query on	116—162—187
Floriculture, A Treatise on, Reviewed	231
Flowers, Query on a Succession of	260
Query on Drying	68
An Essay on	121
Query on an Annual List of Prizes for	187
Query on a List of Hardy Border	198
Flower Garden, Plan of a	222
Roots, &c., A Catalogue of, Reviewed	38
Garden, Reviewed	135
F. M., Query by	202
<i>Francoa appendiculata</i> , Noticed	40
<i>ramosa</i> , Noticed	41
<i>souchifolia</i> , Do.	91
<i>Fuchsia coccinea</i> , Query on	162
<i>Robertsonii</i> , Reference to Plate	216
<i>virgata</i> , On Culture of	146
s, Query on	68—164
Descriptions, &c. of 26 Varieties of	176
Answer on Culture of in Open Borders	189
Remarks on	239
F. W. G., Query by	116
<i>Galega Persica</i> , Noticed	160
<i>Gardenia florida</i> , Do.	284
<i>Garrya elliptica</i> , Do.	184
<i>Gastrolobium retusum</i> , Noticed	157
<i>Geodorum fuscatum</i> , Do	184
<i>Geranium grandissima</i> , Reference to Plate	216
<i>ibericum</i> , Noticed	185
s, On the Culture of	129
Query on	69—163
Query to Mr. Denyer, On	167
<i>Geranium</i> , Query by	163
<i>Gesneria Suttonia</i> , Noticed	18
G. H., On Culture of <i>Lobelias</i> in Pots	174
<i>Gillia Achillæifolia</i> , Noticed	159
<i>aggregata</i> , Reference to Plate	47
<i>coronopifolia</i> , Noticed	208
<i>tricolor</i> , Do.	237
Reference to Plate	264
G. I. T., Culture of <i>Justicia flavicomis</i> , by	27
On Propagation of Annuals, &c.	79
On Striking Cuttings of Plants in Water	241
<i>Gladiolus psittacinus</i> , Remarks on	166
<i>Gladioluses</i> , Irises, &c., Query on	261
Gleanings from Old Authors	271

	PAGE.
<i>Gloxinia maculata</i> and <i>speciosa</i> , Culture of	223
<i>speciosa</i> , Culture of	57
<i>Gloxinias</i> , On Culture of	105
Gravelly Soil, Reply on	22
Green Fly, Query on Destroying the	163
Answer on Do.	189
Greenhouse Plants, On Exposing to the Open Air	66
&c., Query on	164
Query on Situation of a	68
<i>Grevillia arenaria</i> , Noticed	16
Gülielmus, On Flowers,	121
On Propagation of Carnations by	173
On Hints to Juvenile Gardeners	245
Query by	115
H., Query by	139
Harrison, Mr. George, On Culture of <i>Chrysanthemum</i>	88
On Culture of <i>Lobelias</i> , in pots	175
Hayward, Mr. J., Treatise on Plants, &c. by, Reviewed	243
H. C., Query by	187
Heartsease, Query on	139
Query on a List of	188
Lucy and Sir Walter Scott, Reference to Plate	192
A select List of	202
Jane Ann's Favourite, Reference to Plate	239
Heaths, On Culture, &c. of Cape	14—64
Reply on	262
<i>Hedysarum obscurum</i> , Noticed	113
<i>Helianthus speciosus</i> , Do.	39
<i>Heliconia pulverulenta</i> , Do.	62
<i>Heliotropes</i> , Cultivation of	193—273
Reply on Flowering	263
<i>Helleborus odoratus</i> , Noticed	40
Herb Trinity, Query by	188
<i>Hesperoscordum lacteum</i> , Noticed	40
<i>Hibiscus Liliflorus</i> Do.	20
<i>Hortus Woburnensis</i> , Reviewed	12
H. S., Query by	187
H. W., Answer on Earwigs by	188
<i>Hyacinths</i> , On the Properties of	23—143
Query on	260
On taking up	238
<i>Hyssopus orientalis</i> , Noticed	259
<i>Ignoramus</i> , Query by	140
<i>Indigofera violacea</i> , Noticed	234
Inner Temple Garden, Loudon Remark on	239
Innovator, On Gravelly Soil	22
On Culture of <i>Auricula</i> , By	25
On Culture of <i>Carnation</i> , &c. by	49
On Sizes, &c. of <i>Pinks</i> , by	70
On Destroying Slugs, by	141
On Culture of <i>Ranunculus</i> , by	145
On Poisonous Plants, by	152
Answer on Spindling of <i>Carnations</i> ,	166
Query by	238
Answer on <i>Carnations</i> , by	263
On Culture of the <i>Anemone</i> , by	102
On Raising, &c. <i>Dahlias</i> , by	201
<i>Ipomea Horsfallii</i> , Noticed	110
Reference to Plate,	167
<i>rubro-cerulea</i> , Noticed	61
Reference to Plate,	119
Irish Farmer's and Gardener's Magazine Reviewed,	11

	PAGE.
Iris Ruthenica, Noticed	166
Swertii, Do.	238
tenax, Do.	208
Ismene Amancaes, var Sulphurea, Noticed	111
J. J., Query by	118
Jambosa vulgaris, Noticed,	253
January, Floricultural Calendar for	24
Jasione perennis, Noticed	114
J. C., Query by	163
J. C. H., Answer by	262
Jones, Mr. J., On Culture of Dahlia, by	198
July, Floricultural Calendar for	168
June, Ditto Ditto for	144
Justicia flavicoma, Culture, &c. of	27
Juvenile Gardeners, Hints to	245
J. W. C., On raising Carnations from Seed, by	243
J. W. D., On the Double White Anemone,	141
Answers by	164-263-292
Kate, B., On Failure of Ranunculuses, by	4
Kentrophyllum arborescens, Noticed	61
Kennedia nigricans, Do.	282
Lablavia vulgaris, Noticed	112
Ladda, Mr. H., On Culture of Campanula pyramidalis, by	172
On Culture of Heliotropes, by	273
Ladies Botany, Reviewed	207
Lantana involucrata, Noticed	20
Lavatera triloba, Do.	64
Leptosiphon androsaceus, Do.	257
Reference to Plate,	294
Leptospermum ambiguum, Noticed	20
Leptostelma maxima, Do.	259
Letters on Consumption of Malt, Reviewed,	156
Liatris scariosa, Noticed	91
Libertia formosa, Do.	17-39
Liddel, Mr. H., Query by	261
Lilium pomponium, Noticed	114
Lily of the Valley, Query on the	186
Remarks on	239
Lime, &c. on Sulphate of	190
Limnanthes Douglassi, Noticed	137
Limnocharis Humboldtii, Do.	40
Linaria Dalmatica, Do.	139
triornithophora, Do.	64
Linton, W. J., Query by	290
Linum arboreum, Noticed	22
Cumminghi, Do.	20
Liparis guineensis, Do.	137
Lobelia Cardinalis, &c. Simple Mode of Culture,	86
fulgens, Remarks on	239
polyphylla, Noticed	159
puberula, Do.	38
Lobelias in Pots, Culture of	174
Lonicera Chinensis, Noticed,	110
Lophospermum Rhodochiton, Noticed,	210
Reference to Plate,	240
Lupinus albidifrons, Noticed	40
densiflorus, Do.	184
incanus, Do.	15
leptophyllus, Do.	187
mutabilis var. Cruckshankii, Noticed	95
nanus, Do.	237-258
ornatus, Do.	64

	PAGE.
M., On British Ferns	29
On Culture of British Ferns, by	33
On the Arrangement of Ditto, by	81
Madia elegans, Noticed	20
Magnolia, glauca sempervirens, Query on	140
Magnoliaceæ, Remarks on different kinds of Magnolias, by	5
Maleherbia linearifolia, Noticed	282
Malt, Letters on the Consumption of, Reviewed,	156
Malva Munroana, Noticed	282
Manetta glabra, Noticed	112
Reference to Plate,	114
Mantell, Mr. J., A Treatise by, Reviewed,	231
Manure, On Human Urine as a	118
March, Floricultural Calendar for	72
Marnock, Mr. R., On making Gravel Walks	125
Martin, Query by	44
Marsdenia flavescens, Noticed	17
May, Floricultural Calendar for	120
Maytenus chinensis, Noticed	256
Menzies, Mr. J., On Culture of Calceolarias as Greenhouse Plants by	84
Mesembryanthemums, Query on Flowering	117
Meta, On a Yellow Flowering Plant	22
Miles, Mr. J., Query by	69
On Culture of the Anemone	70
Milla uniflora, Noticed	187
Mimulus luteus, var. variegatus, Noticed	183
roseas, Noticed	255
Smithii, Do.	138
On Raising from Seed	262
Monarda fistulosa flora maculata, Noticed	91
Morea tricuspis, var. oculata, Noticed	209
Morinda jasminoides, Noticed	235
Mountford, Mr. W. On Culture of Gloxinia speciosa, &c.	57
Musa, Query on the Genus	280
Myrtella, Query by	93
Myrtles, Answer on the Culture of	165
Query on	21—93
and Heliotropes, To flower	292
Nemophilla insignis, Noticed	257
Reference to Plate	294
Nierembergia aristata, Noticed	258
filicaulis, Do.	62—159
Reference to Plate	95
intermedia, Noticed	138
November, Floricultural Calendar for	264
N. S. C. Query by	162
Nuttallia papaver, Noticed	16
Nycterinia Lychnidea, Do.	138
October, Floricultural Calendar for	240
Oenothera Drummondii, Noticed	282
Oleander, Query on the	163
Olitor, On Raising Stocks by	200
Oncidium altissimum, Noticed	63
ampliatum, Do.	235
ciliatum, Do.	98
Onopordium arabicum, Do.	61
Opuntia Braziliensis, Do.	39
cylindrica, Do.	61
Orchideæ, Celebrated Collection of	115
Orchideous Plant, On Culture of	235
Orehis foliosa, Noticed	237
Ornithidium album, Do.	90

GENERAL INDEX.

305

	PAGE
<i>Oxalis crenata</i> , Noticed	42
<i>Pancratium pedale</i> , Noticed	40
Pansy, Remarks by	46
On Flora's Dial and Calendar	141
2d, Query by	68
Jane Ann's Favourite, Reference to Plate,	239
Query on the	139
Pansies, Query on a List of	168
Lucy and Sir W. Scott, Reference to Plate,	192
A Select List of	207
Partridge Breast Aloe, Query on	290
<i>Passiflora gossyhiifolia</i> , Noticed	18
Kermesina, Do.	18
elegans, Reference to Plate	291
Paul Pry, On Culture of the Auricula	266
Pearce, Mr. D., Query by	141—262
On Raising Dahlias from Seed	149
On Culture of the Genus Cactus	175
On Culture of the Carnation	219
Pelargonium, Query to W. Denyer, on the	187
<i>grandistoma</i> , Reference to Plate,	216
Query on the	163
On Culture of the	129
Query on Flowering in Winter	69
On Striking the	3
Pentstemon Richardsonii, Noticed	21
<i>speciosa</i> , Do.	258
<i>Pericallis Tussilaginis</i> , Do.	64
<i>Pernetia mucronata</i> , Do.	138
<i>Petromarula pinnata</i> , Do.	41
<i>Phacelia tanacetifolia</i> , Do.	209
Phillips, Mr. A., Query by	68
Philos Phusa, Query by	140
Phloxes, Query on a List of	186
Pigeons, On the Properties of	144
<i>Pimelia gracifolia</i> , Noticed	16
<i>hypericiana</i> , Do.	158
Pink, Duke of St. Albans, Reference to Plate	203
Lady Haggerston, Do.	48
s, &c. Query on the size of	44
Query on Davey's Eclipse	44
On the Properties of	46—143
On the Sizes, &c. of	70—119
Culture of in Pots	133
Query on	163
List of, that have obtained the most Prizes during 1834	289
Pinnock, Mr. S., Query by	116
Plants, On Watering	271
On such as are Adapted for Masses	203—228—251—280
Strictures on Disposing in Masses	161
On Propagation and Culture of	225
On Promoting the Healthiness of	113
On Giving English Names to	115
Query on a Selection of	116
On Culture, &c. of, arranged in the Natural System	31
Query on Poisonous	68
On Reviving	130
Suitable for a Bed on a Lawn	158
On Poisonous	158
Query on Hardy	299
Plant-lice and Frog-hoppers, On Destroying	250
Peony, On the Culture of the Tree	103

	PAGE:
<i>Pæonia edulis</i> , Noticed	160
<i>montan albida plena</i> , Noticed	158
<i>var. variegata</i> Do.	138
<i>Polyanthus</i> , Burnard's <i>Formosa</i> , Reference to Plate	167
<i>Polyanthuses</i> , On the Properties of	118—143
On Cultivation of	196
List of, that have obtained the most Prizes during 1834.	283
<i>Pomegranates</i> , Query on the Double	44
On Flowering the Double	94
<i>Portulaca Gilliesii</i> , Reference to Plate	144
Pots, Query on the Sizes of	162
Answer on the Sizes of	44
Potsherds, Query on	116
Primrose, Query on the Chinese	115
<i>Pultenea flexilis</i> , Noticed	200
<i>subumbellata</i> , Do.	17
<i>Pyrethrum uliginosum</i> , Do.	64
<i>Pyrus crenata</i> , Do.	91
Ragwort, On Culture of	232
<i>Ranunculuses</i> , On Raising Seedling	97
Query on	188
On the Failure of	4
Query on Raising	43
On the Properties of Good	143
On Culture of	145
Revell, Mr. J. On Culture of the <i>Polyanthus</i>	196
<i>Rhodanthe Manglesii</i> , Noticed	237
<i>Rhododendron arboreum</i> , <i>var. album</i> , Noticed	38—183
Query on	44
<i>campanulatum</i> , Noticed	150
<i>macranthum</i> , Do.	282
<i>ferrugineum</i> , <i>var. album</i> , Noticed	258
On Situations suitable for	67
<i>Ribes niveum</i> , Noticed	208
<i>punctatum</i> , Do.	92
<i>sanguineum</i> , Do.	182
Robertus, Answers by	190
Roots, Query on Bulbous	116
<i>Rosa indica</i> , Noticed	119
<i>rapa</i> , Do.	184
Rose, Query on the Dark China	186
Bay, Query on the	163
On Forcing the	f
s, Remarks on 1,000 Varieties, &c.	8—34—60—87—107—132—154
	181—229—253—276
On Pillars of	114
On Budding Wild	166
Query on	262
Climbing	69
Query on Raising from Seed	93
On the Culture of China	149
Royal Sovereign Tulip, Reference to Plate	167
S. A., On a Dwarf Yellow Flowering Plant	292
<i>Salpiglossis linearis</i> , Reference to Plate	119
On the Culture of	52
<i>Salvia angustifolia</i> , Reference to Plate	144
Noticed	19
Salvias, Culture of, as Border Plants	99
<i>Sanguisorbia canadensis</i> , Noticed	113
Saul, Mr. M. On Budding Wild Roses	166
S. C. A., Query by	44
Answer on Green Fly, by	180

	PAGE.
<i>Schinus molle</i> , Noticed	207
<i>Schizanthus</i> , Query on	290
<i>Scottia laevis</i> , Noticed	63
<i>Sedum oppositifolium</i> , Noticed	185
<i>Sedums</i> , Query on	69
Answer on	118
<i>Senecio elegans</i> , Culture of	252
September, Floricultural Calendar for	216
<i>Silene virginica</i> , Noticed	208
<i>chlorefolia</i> , Do.	282
<i>Silphium perfoliatum</i> , Do.	255
<i>trifoliatum</i> , Do.	255
Slugs, Query on Destroying	94
Answer on Do.	141
On Preventing, Destroying Annuals	190
Snowdrop, On Striking Pelargoniums	3
On the Prices of Tulips	45
Answer on Tulips	45
On a Fancy Flower Border	47
Query by	69
On Reviving Plants	130
On Culture of Auricula, by	169
On the Sale of Tulips	224
Retrospective Notices, &c., by	238
Gleanings from Old Authors, by	271
Soils, Query on	69
and Manures, On	268
<i>Solanum tuberosum</i> , Noticed	257
<i>Sollya heterophylla</i> , Do.	93
Soot, On Destroying Grubs with	42
<i>Sphaerostema propinquum</i> , Noticed	184
<i>Spiraea grandiflora</i> , Reference to Plate	119
Sporks, Mr. W., Query by	261
<i>Stachys inflata</i> , Noticed	209
<i>Stanhoepia eburnea</i> , Do.	256
S. T. C., Query by	163
<i>Stigmaphyllon aristatum</i> , Noticed	92
Sock and Aster Seeds, Query on Sowing	162
s, Query on Giant Brompton	261
On Culture of Ten Week	265
On Raising Plants of Double	200
St. Patrick, On a List of Roses ... 8—34—60—87—107—133—154	181—229—263—276
<i>Streptanthus obtusifolius</i> , Noticed	110
T. B., Query by	139
T. G. S.	21
<i>Thysanotus juncens</i> , Reference to Plate... ..	95
<i>Tigridia pavonia</i> , Culture of	132
<i>Trachymene coerulea</i> , Noticed... ..	160
<i>lanceolata</i> , Do.	182
<i>Tradescantia pilosa</i> Do.	38
Transplanting, Method of	66
Trees, On the Chemical Changes of the Sap of	65
<i>Triteletia laxa</i> , Noticed	183
<i>Trochocarpa laurina</i> , Noticed	137
<i>Tropeolum majus</i> , var. <i>Shillingii</i> , Reference to Plate	264
<i>pentaphyllum</i> , Do.	95
<i>tricolorum</i> , Do.	144
Tulip, Emily, Reference to Plate	71
Royal Sovereign, Do.	167
s, Remark on Prices of	45
Answer to S. A. H., on	45

	PAGE.
Tulips, On the Properties of	143
Observations on the Sale of	224
On the Change in	115
Culture of	73
List of, that have obtained the most Prizes during 1834 ..	288
T. W., Remarks on <i>Gladiolus psittacinus</i> , by	166
Tyso, The Rev. J., On Raising <i>Ranunculuses</i>	97
Van Thol, On a Dwarf Yellow Flowering Plant	22
<i>Verbena chamædriifolia</i> , Noticed	182
<i>sulphurea</i> , Do.	41
<i>urticifolia</i> , Do.	113
<i>Vertumnus</i> , On the Deterioration of the <i>Dahlia</i>	58
<i>Viburnum cotinifolium</i>	62
Village Maid Rose, Reference to Plate	192
<i>Villarsia chilensis</i> , Noticed	19
Violet, Query by	117—290
Answer to	292
Walks, On Making, &c. of	125
Water Lily, Query on the White	116
W. B., Query by	261
W. D., Query by	44
Weeping Willow, Query on the	43
W. E. F., Query by	163
<i>Westringia cinerea</i> , Noticed	90
<i>Dampierii</i> , Do.	91
Wigg, Rev. S., Query by	43
William Frederick, Query by	163
Willis, G. R., on Forcing the Rose	2
Winfield, Mr. J., On Culture of <i>Lobelia cardinalis</i>	86
Wire Worm, Query on Destroying the	44—117
W. J. P., On Culture of the Tulip	73
W. K., On Culture of <i>Gloxinias</i>	223
Wood, Mr. W., On Forcing the Rose	1
Woolwich Florist's Society	191
W. T., Query by	140
W. W. J., Query by	188
X. Y. Z., Query by	21
X. L., Query by	68
Youell, Mr. W., Remark by	119
Young Flora, Answers by	165—166
<i>Yacca superba</i> , Noticed	184
<i>Zappania nodiflora</i> , var. <i>Rosea</i> , Noticed	63

END OF VOL. II.

GEORGE RIDGE, PRINTER, MERCURY OFFICE, SHEFFIELD.

Names.	P.p.	Prizes.						Tot.
		1	2	3	4	5	6	
ROSES.								
Triomphe Royale (Heroine)	5	1	6	5	3	8	4	32
Rose Unique (Princess d'Austurius) ..	10	2	4	3	1	5	6	31
Dolittle (Michael de Lisle).....	1	13	2	3	4	2	1	26
Duc de Bronte.....	4	3	1	5	2	3	7	25
Rose Vesta (Hebe)	2	4	6	3	1	5		21
Walworth	3	6	1	1	4	6		21
SELFS.								
Mine d'Or.....	20	3	5					28
White Flag	3	14	6	1				24
Mountain of Snow	4	10	3	2	2			21

PINKS.

DARK LACED.								
Suwarrow	12	6	3	5	1	1		28
Lustre	5	4	8	3		5		25
Marianne	3	5	1	4	5	2		20
Mann's Miss Ricketts	1	8	5	1				15
RED LACED.								
George the Fourth	2	10	2	3	4		1	22
Princess Charlotte	3	5	4	3	1	2	1	19
Lady Green	2	6	3	1	3		1	16
Humphrey Cheetham	4	7	2		1	1		15
BLACK AND WHITE.								
Cicero	4	4	6	2	1	3		20
Parry's Union	5	7	3	1		1		17
Barratt's Conqueror	4	3	4	2	2		1	16
Davey's Eclipse	2	5	1	4	1	2		15

CARNATIONS.

SCARLET BIZARRES.								
Wild's Perfection	2	10	6	1	4	5	3	31
Waterhouse's Rising Sun	2	5	8	6	1	7		29
Ely's Mayor of Ripon	3	1	5	7	4	1	3	24
Walmsley's William the Fourth	4	2	4	5	1	5	1	22
Smalley's Foxhunter								
Tate's Friday Night								
CRIMSON BIZARRES.								
Wakefield's Paul Pry	6	21	11	2				40
Gregory's King Alfred	2	6	8	9	1	4	3	33
Cartwright's Rainbow	1	5	7	3	6	1	2	25
Lee's Duke of Kent	2	1	5	4	1	3	2	18
Birmingham	1	3	4	2	5	1		16
Orson's Apollo	2	2	5	1	4		2	16
SCARLET FLAKES.								
Pearson's Madame Mara	8	23	13					44
Maude's Rowton	1	4	2	1	5	8	2	23
Thornicroft's Blucher		2	1	7	3	6	1	19
Taylor's Festival	3	4	3	6	1	1		18
Serjeant's Washington		3	5	2	4	2	1	17
Potter's Champion	2	1	3	4	6	1		17
PURPLE FLAKES.								
Turner's Princess Charlotte	6	20	3	1	5			35

Names.	P.p.	Prizes.						Tot.
		1	2	3	4	5	6	
Bellerophon	2	13	4	3	1	2	4	29
Bates's Wellington	1	3	5	1	4	6	1	21
Wood's Commander		5	2	4	1	5	1	18
Wilde's Marianne	1	2	5	2	3	1		14
Alfred the Great		3	1	4	5		1	14

PINK FLAKES.

Lady Hood	4	2	5	8	9	5		38
Duchess of Devonshire	5	6	1	2	8	7	1	30
Clogg's Smiling Beauty	2	3	6	4	1	6	3	25
Miss Foote (Sir Geo. Crewe)	1	5	2	7	3	2	2	22
Redfearn's Miss Ward		3	6	2	5	1	2	19
Wonderful (Faulkner's Eliza)	2	1	5	4	2	2	1	17

PURPLE EDGED PICOTÉES.

Lee's Cleopatra	1	9	5	8	7	3	2	35
Princess Victoria	2	5	9	6	3	2	3	30
Hufton's Miss Emma		6	1	3	8	5	3	26
Beauty of Northampton	1	3	2	6	7	3	2	24
Mason's Wellington		2	5	4	6	2	2	21
Fletcher's Maria	1	1	4	3	8	3		20

RED PICOTÉES.

Hufton's Will Stukely	4	6	7	3	5	6		31
Martin's Prince George	1	8	6	4	3	5	2	29
Pearson's Chilwell Beauty		5	4	6	4	2	5	26
Hird's Alpha	3	6	7	3	2	3		24
Kenney's Incomparable	2	2	5	3	6	3	2	23
Bright Star (Ringleader)	2	3	3	6	3	2	3	22

QUERIES.

ON BLOOMING THE PARTRIDGE BREAST ALOE.—I should feel obliged by you, or any of your numerous correspondents, informing me of the soil and treatment required to make the Partridge Breast Aloe bloom. I have had it more than six years, and as yet there has not any sign of bloom appeared. An answer as soon as possible would greatly oblige.

W. J. LINTON.

ON THE SCHIZANTHUS.—Will you, in your next Number, give a hint of the best method of raising and treating the Schizanthus? We have found it fail so completely this summer, that I fear there has been some error in the mode of treating it; and a few hints will be gratefully received, by your well-wisher and admirer,

VIOLET.

Shapwick, near Glastonbury, Sept. 8th.

ON HARDY PLANTS, &c.—You would greatly oblige a very considerable number of your subscribers, if you would, in an early number of your valuable and interesting publication, favour them with a list of the principal hardy plants now in cultivation, similar to the one of greenhouse plants given in the April Number of the first volume of the *Cabinet*, p. 38. I think it would be an improvement if, at the end of each description of plant, it were specified whether they were evergreen or deciduous shrubs, herbaceous plants, perennials, &c. &c.

A CONSTANT SUBSCRIBER.

Sheffield, July 31st, 1834.

ON THE GENUS MUSA.—I should feel obliged to you, or any of your numerous correspondents, to inform me, through the medium of the *Cabinet*, what class and order the genera of *Musa* properly belongs to, as I find in the

two 5th edition of Donn's Catalogue that it is placed in the 23d class, Polygamia, and order 1, Monœcia; likewise in *Drummond's First Steps to Botany*; but in Loudon's Catalogue, *Hortus Britannica*, it is in the 5th class, Pentandria, order 1, Monogynia, in the Linnæan system; and I shall take it as a favour if you, or any of your correspondents, will decide the question, as to which is the proper class and order, and which catalogue is the most to be relied on; as I am a young botanist, and want the best information about plants that I can get. An answer will be thankfully received.

VOLTAIRE.

SEEDS OF THE ANCHUSA PANICULATA, LUPINUS ELEGANS, &c.—I should be obliged if either you, or some of your correspondents, would inform me where I can procure the following seeds, all of which, with the exception of the four first, are mentioned in No. XII. of the *Floricultural Cabinet*:—*Anchusa paniculata*, *Lupinus elegans*, *Nolana grandiflora*, *Nolana tenella*, *Astragalus trachyceras*, *Astragalus reticulatus*, *Calendula Mexicana*, *Gentiana humilis*, *Gilia capitata alba*, *Gilia gracilis*, *Andiosace maciocarpa*, *Eutoca Franklini*, *Eutoca multiflora*, *Lobelia bicolor*, *Lotus arenarius*, *Lotus arabicus* and *conjugatus*.

D. G. H.

Oct. 2d, 1834.

ON TULIPS, VERBENA MELINDRES, LUPINUS POLYPHILLIS, &c.—I have recently become a subscriber to the *Floricultural Cabinet*, and am much pleased both with its plan and execution, as it is what I have long wished to see established, particularly with respect to its price, as this puts it within the reach of many a poor cottager who, like myself, cannot afford more expensive publications, however excellent they may be in their kind. But as knowledge and improvement, as well as pleasure and amusement, are great objects with me in all that I read, I beg leave for a spare corner in one of your pages for the following communications, which I humbly submit to the notice of some of your more able correspondents.—In my small bed of Tulips this year I have had some much better than I ever saw them before, and others much worse; this has been owing to the change in their colours. I noticed a many amongst them of the yellow and brown changed to a self-brown, and greatly degenerated. Some that were of a pure crimson (double ones,) I observed to be changed to crimson and white. Is there any method to be pursued that will prevent this change? If there is, I should feel greatly obliged to know it.—In what manner must the *Verbena melindres* be treated, so as to be preserved through the winter? I had several plants of it last year, which I potted and brought into my little cottage before the winter months commenced; but before spring they were dead. This could not be through the severity of the weather, because there was no frost within doors. A friend of mine also potted nearly a score, and brought them into the greenhouse; and I believe he had only one remaining at spring. This is a plant that I am extremely fond of, on account of the brilliancy of its flowers, but am totally ignorant of its nature and qualities; therefore a little information respecting it will be highly acceptable. Is it hardy, or tender? Does it require to be kept dry or moist? Will it stand a severe winter in the open ground, or must it be brought in and sheltered?—I have a very large plant of *Lupinus polyphillis* which has produced nearly 30 flowering stems, but it has changed its beautiful blue colour to a dark white, with a small tinge of blue; was I clever enough, I would have sent a drawing of it. Now, will this be called a new variety, and worth cultivating? If it is, I will raise a number of plants, as I have preserved a good quantity of seeds from it.

July 22d, 1834.

A POOR COTTAGER.

P.S. As I am now writing for information, can any of your correspondents inform me where the following desirable plants are to be obtained, and also the prices thereof:—*Lupinus leucophyllus*, *Pulsatilla vernalis*, *Dianthus Fischeri*, *Digitalis lanata*, *Dracophyllum rutans*, *Abronia mollifera*, *Hyoscyamus orientalis*, *Polygala panicifolia*, *Pentstemon ovatus*, *Oenothera pallida*, *Oenothera taraxifolia*.

ANSWERS.

ON STRIKING CUTTINGS OF BIGNONIA, &c.—“A Lover of Flowers” (page 116) should plant cuttings of the Bignonia either in sand or common earth, under a hand-glass, placed in heat, either in May or August. My plant is against a wall, due south, and never had the slightest covering.

AN ARDENT AMATEUR.

ON CACTUS SPECIOCISSIMUS.—In answer to “An Amateur” in Vol. I. p. 141, in the *Floricultural Cabinet*, I inform him that I have the Cactus speciocissimus flowering in my greenhouse every alternate year, without any additional heat; it is kept perfectly dry during the winter.

August 11th, 1834.

A SUBSCRIBER.

ON BALSAMS.—To the enquiries of your correspondent “C.” July 9th, respecting the cultivation of Balsams, I beg to reply that on the age of the seed I place my reliance for the success in flowering. Contrary to most other plants, balsam seed requires to be kept some years before it is sown; and I have now some very healthy plants with good double flowers, raised from seed which I gathered in 1829.

F. M.

Southampton, August 11th.

ON A DWARF YELLOW FLOWERING PLANT.—One of your correspondents, some time ago, enquired for information respecting a dwarf yellow flowering plant, to agree with *Verbena melindres*, *Lobelia erinus*, &c. I would recommend to him *Gratiola aurea*, a hardy herbaceous plant, which is something like *Lobelia gracilis* in growth, and would answer every purpose he requires.

Aug, 16th, 1834.

S. A.

TO FLOWER MYRTLES AND HELIOTROPES.—In the month of April select any quantity of Myrtles you may wish to flower; take them to the potting-shed; with a pointed stick remove all the old surface mould as deep as possible without injuring the roots; add some fresh mould, half loam; half dung, mixed well together, to within one inch of the rim of the pot; clean out an empty pit or frame from all weeds and dirt; add an inch or two of sifted cinders over the bottom, beating it down firm and level with the back of a spade; set your plants in so as to be clear of each other; give them a good watering with a rose-pot, to settle the mould; shut up the lights close; every morning, when the weather is favourable, give plenty of air for one hour, by sliding the lights up and down, or by taking them off; keep the lights close the remainder of the day, so as to draw a good sun heat inside the frame; if the sun should be very bright and powerful shade with a mat for two or three hours in the middle of the day, but not longer; sprinkle them over head freely with water; and when they show their blossom buds, increase the quantity of air daily; so that by the time the flowers are ready to expand they may be able to stand the open air. By this treatment Myrtles from one year old and upwards may be flowered in abundance.

Great Bookham, Surrey, July 2d, 1834.

J. W. D.

ANSWER TO VIOLET.—In answer to VIOLET, I recommend *Annual Russian*, *German and French Stocks*; they look extremely well when growing in a long row, and being of all colours make an handsome appearance; they grow about eighteen inches high. *Argemone*, (annual kinds,) three or four varieties, grows three to four feet high; seeds of the above kinds may be obtained of most nurserymen, and in sixpenny packets if desired. *Dodecatheon Meadia*, (perennial,) pink, eighteen inches high, 9d. each. *Phloxes*, (perennial,) all colours, two feet high, 9d. to 2s. each. *Pansies*, all colours, 9d. each, for the ends of the bed. *Commellina tuberosa*, two to three feet high, would look pretty towards the middle, the flowers being of so fine a blue; seeds may be obtained of Messrs. WARNER & Co., Cornhill, London, 6d. per packet, and roots at 6d. each. *Dahlias*, at stated distances, down the middle, all colours, all heights, all prices; half-a-dozen, at least, of the white kinds should be selected. *Campanula persicifolia*, double blue, eighteen inches high, 9d. to 1s. each. *Campanula pyramidalis*, two or three plants of it, three to six feet high, blue and white varieties, 1s. each. *Erodium hymenodes*, a plant or two, six

inches high, spreading, perennial, pink flowers. *Double Rockets*, white, purple, and yellow kinds, four or six plants, two feet high, 1s. each. *Tradescantia Virginica, congesta*, white, one foot high, 1s. each. *Gentianella*, blue, four to six inches high, two or three tufts, 1s. each. *Tigridia pavonia*, (Tiger Flower,) spotted, orange red with dark, a few patches of four or six roots in each, two feet high, 3s. per dozen roots. *Eischscholtzia californica*, two or three plants, two feet high, yellow, 9d. each. *Double Scarlet Lychnis*, two to three feet high, 1s. each. *Verbena Melindres*, scarlet, three inches high, spreading, 1s. each. *Lobelia fulgens*, crimson scarlet, two feet high, 9d. each. *Coreopsis lanceolata*, (Tick-seed Sunflower, yellow,) four feet high, 9d. each. *Rosa indica minor*, one or two plants, crimson, two feet high, 1s. each. And the following kinds of annuals:—*Media elegans*, yellow, four feet. *Sweet Peas*, *Malope trifida*, deep rose, two feet. *Lupines*, of sorts. *Prince's Feather*. Two or three *Enotheras*, (Evening Primrose.) *Lobelia erinoides*, six inches, blue. *Collinsia grandiflora*, nine inches high, blue. *Convolvulus minor*, three feet high, blue and white. *Convolvulus major*, rose, blue, and white varieties, three to six feet high, varying according to the richness of the soil. *Zinnia elegans*, purplish crimson, one foot high.—(See Vol. I. pages 43-45.)

AN ARDENT AMATEUR.

REPLY TO THE QUERY OF "A COUNTRYMAN."—The author of the *Domestic Gardener's Manual* regrets that he has so long overlooked this query addressed to him as "G. I. T.," per date July 9th, 1834, (No. XVIII, p. 188.) It is his desire to attend to every question which may be referred to him by any one, and at any time; but the fact is, his occupations are so multiform and unintermitting, that he occasionally does not even see the several articles in the periodicals for some considerable time after they come to hand. In a recent paper addressed to the Editor, he observed that he was not a florist; and in respect to the *Ranunculus* in particular, he is not from observation enabled to write very minutely. The subject must, therefore, be considered generally. The leaves of all plants are provided with oscular pores—termed in botanical language *stomata*, (from the Greek *stoma*, a mouth.) These organs in tree leaves abound chiefly on the under surfaces, and are unquestionably transpiratory orifices;—in fact moisture, during hot sunshine, is frequently seen to be deposited on other leaves or substances that happen to be nearly in contact with, and below the under surface of a large leaf. In herbaceous plants, both surfaces are generally provided with *stomata*; but in these, the analogy of facts proves that the upper surfaces only are destined to receive water; for all, or nearly, present those surfaces to the falling rain. It may be doubted whether any good results can be traced from watering artificially over leaves; and though rain falls on plants and refreshes them, it is quite certain that the atmosphere is in a peculiar electric condition before rain can be either formed or fall. This condition no human being can induce; therefore, to water over leaves is always an artificial and unnatural operation. The under surfaces are peculiarly injured by waterings; and Mr. KNIGHT has proved that a melon crop was once ruined by injudicious syringing so applied, to wash away the *acarus*. It should seem that the *Ranunculus* affects a moist, dripping season; and if so, the watering by rain, (that is during a state of air prepared for the application,) did good, in as far as it was perfectly congenial to the habit of the plant. In dry seasons it has been observed that among a whole bed of the plants, there was scarcely a leaf on them that was not yellow and unhealthy. In such seasons, the water applied by the gardener could only increase the evil, by scorching the upper surfaces, and closing the pores of the lower, by the splashing and dirt which it created. Light also acts inimically on under surfaces; and the writer has now before him a healthy fig tree, whereon half-a-dozen leaves are stained deep brown, and become, as it were, burnt, by merely bending down a branch so as to expose those surfaces to the sun. Physiologically, then, G. I. T. thinks that water ought always to be applied to the ground only, unless disease or insects require its application to the leaves,—that the leaves of low growing hardy herbaceous plants ought never to be sprinkled; as whatever tends to leave water on them in bright weather, provides the means for the destruction of many pores of the cuticle by obstruction and burning;

and, therefore, if the application of water be indispensably required, it ought always to be given between the plants, so copiously as to reach the lateral fibres, and at an hour when it may be aided in its effects by the condensing dew.

REFERENCE TO PLATE.

Nemophila insignis. A very pretty flowering annual, growing from six inches to a foot high, requiring a situation and treatment similar to Calandrinias, (see *Cabinet*, page 204.) With such attention, and full sun upon it, the flowers make a very showy appearance; and by having two sowings of seeds, the plants may be had in bloom from June to October. A bed of it would look well. It may be obtained of the principal nurserymen. The plant belongs to the 5th class Pentandria, and 1st order Monogynia; natural order Hydrophyllææ. The name is derived from *nemos*, a grove, and *philæo*, to love; referring to its natural situation.

Leptosiphon androsaceus. A very neat flowering annual, and being about the same height as the *Nemophila*, and profuse in flowering, renders it a very desirable plant. If sown as directed for the Calandrinia, (see page 204,) it may be had in bloom, if shaded from scorching sun, from May to October. The plant belongs to the 5th class Pentandria, and 1st order Monogynia; natural order, Polemoniaceæ. Greek Valerian tribe of plants. The name is derived from *leptos*, slender, and *siphon*, a tube; referring to the slender tubular part of the flower.

Passiflora elegans. This very splendid flowering *Passiflora* was raised by JAMES COCKBURN, Esq., Guernsey, from seed sent from South America. Mr. COCKBURN states that it blooms in the greenhouse in Guernsey, and is increased freely by cuttings. It is a valuable acquisition to this beautiful tribe of plants, and more particularly so in succeeding well in the greenhouse. We have tried several of the South American species, by planting them in a border in the open air during summer, and find them succeed well, blooming profusely. At the end of autumn we take up the plants, repot them, and protect them in the greenhouse during winter. From the very particular description of the plant and flower in all their parts, obligingly sent us by Mr. COCKBURN, and having examined the particulars of all other hitherto published species, we find the present to be distinct, and have given it the specific name it so highly merits.

FLORICULTURAL CALENDAR FOR DECEMBER.

PLANT STOVE.—Roses, Honeysuckles, Jasmines, Persian Lilacs, &c. required to bloom from January, should be brought in early in the present month. The plants should be placed at first in the coolest part of the house; never allow them to want water. Pots, or boxes containing bulbous-rooted flowering plants, as Hyacinths, Narcissuses, Persian Irises, Crocuses, &c. should occasionally be introduced, so as to have a succession of bloom. All stove plants will require occasional syringing over the tops, in order to wash off any accumulated dust from the foliage. Cactus plants that have been kept out of doors, or in the greenhouse, should occasionally be brought into the stove for flowering.

GREENHOUSE.—As much fire as will barely keep out frost will be necessary; and for the purpose of drying up damp arising from foggy nights, or from watering, all possible air in the day time should be admitted; but mind to keep the plants from damage by frost. Chrysanthemums will require a very free supply of air, and a good supply of water; by the end of the month many will be going out of bloom; such should be cut down, and if any kind is scarce, the stalks may be cut into short lengths, and be struck in heat; always cut the lower end of the cutting close under a joint. If greenhouse plants require watering or syringing over the tops, let it be done in the morning of a clear day, when air can be admitted; and towards evening a gentle fire-heat should be given.

FLOWER GARDEN.—Be careful to protect beds of what are technically

called florist flowers, should severe weather occur. Calceolarias that were cut down and re-potted last month will require attention not to water too much, or they will damp off; keep them in a cool and airy part of the greenhouse or pit-house. Auriculas and Polyanthuses will require plenty of air in fine weather, and but little water, (see page 25.) The like attention will be required to Carnations, Pinks, &c. kept in pots. Dahlia roots should be looked over, to see if any are moulding, or likely to damage; let the roots be dry if they are to be laid in heaps. Newly planted shrubs should be well secured, so that they be not loosened by the wind. Tender evergreens newly planted would be benefitted by a little mulch of any kind being laid over the roots. During hard frosts, if additional soil be required for flower beds upon grass lawns, advantage should be taken to have it conveyed at that time, so that the turf be not injured by wheeling, leading, &c.

INDEX TO THE EMBELLISHMENTS

In the Floricultural Cabinet, Vol. II.—1834.

	Facing Page.	Reference.
Beauty of Sheffield Dahlia	1	24
Calandrinia grandiflora	25	47
Calceolaria arachnoidea, var. <i>refulgens</i>	145	167
<i>formosum</i>	25	48
<i>Harrisonia</i>	217	239
Chorizema spartioides	73	95
Cornus capitata	49	71
Delphinium chinensis, var. <i>albiflora</i>	241	263
Duke of St. Albans Pink	241	263
Echites stellaris	145	167
Emily Tulip	49	71
Echscholtzia crocea	145	167
Formosa Polyanthus	145	167
Fuchsia Robertsii	193	216
Gilia aggregata	25	47
<i>tricolor</i>	241	264
Grandissima Geranium	193	216
Ipomea-Horsfallie	145	167
<i>rubro-cœrulea</i>	97	119
Jane Ann's Favourite Heartsease	217	239
Lady Haggerston Pink	25	48
Leptosiphon androsacens	265	294
Lophospermum Rhodochiton	217	240
Lucy Heartsease	169	192
Lupinus mutabilis, var. <i>Cruckshankii</i>	73	95
Manettia glabra	121	144
Nemophila insignis	265	294
Nierembergia filiculis	73	95
Passiflora elegans	265	294
Portulaca Gilliesii	121	144
Royal Sovereign Tulip	145	167
Salpiglossis linearis	97	119
Salvia angustifolia	121	144
<i>doliceachya</i>	145	167
Sir Walter Scott Pansy	169	192
Spirea grandiflora	97	119
Thysanotus junceus	73	95
Tropæolum majus, var. <i>Shillingii</i>	241	264
<i>pentaphyllum</i>	73	95
<i>tricolorum</i>	121	144
Village Maid Rose	169	192

GENERAL INDEX

TO VOL. II.

	PAGE.
A., Query by	139
A. B. C., Query by	162
Acacia brevipes, Noticed	256
elongata, Do.	183
hastulata, Do.	207
lineata, Do.	234
plumosa, Do.	281
umbrosum, Do.	183
A Cambrian, Query by	93
Aconitum Stoerckianum, Noticed	19
versicolor, Do.	42
A Constant Reader, Query by	93
A Constant Reader and Subscriber, Query by	93
A Constant Subscriber, Query by	68
Do. by	290
A Country Clergyman, Do. by	69
A Countryman, Do. by	188
Reply to the Query of	293
Adam the Gardener, Reviewed	88—108
Adesmia viscosa, Noticed	92
Londonia, Do.	281
uspalatensis, Do.	41
A. E., On the Cultivation of Ten Week Stocks	265
Agapanthus umbellatus, Query on	94
Answer on	166
On the Culture of	189
A Jersey Gardener, On the Culture of Salvias	99
A Lady N., Query by	116
A Learner, Do.	21
Alonsoa linearis, Noticed	139
A Lover of Flowers, Query by	69—115—116
Alstroemeria aurea, Noticed	235
ligtu, Do.	93
oculata, Do.	207
pelegrina, Do.	42
Alyxia daphnoides, Do.	110
ruscifolia, Do.	109
Amaryllis sulica, Do.	109
kermesina, Do.	39
Jacobæa, Answer on the	141
A Middlesex Amateur, On Culture of Pinks in Pots	133
On Culture of the Auricula	199
Anchusa paniculata, Query on Seeds of	291
An Ardent Admirer, Remarks on Dahlias	46
An Ardent Amateur, On the Bignonia	70
On Culture of Tree Pæony	102
On Compost for Flowers, by	217
Answer on the Bignonia	292
Answer to Viola	292
Andromeda salicifolia, Noticed	16

